



DIGITAL SKILLS DIGEST

Stories about tech-savvy teens making the world a better place



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AMAZING
DIGITAL
PROBLEM
SOLVERS



BUILD YOUR
GREAT IDEA

HOW TO SPOT
FAKE NEWS

THE NEW GENERATION OF PROBLEM SOLVERS

These innovative teens are using their digital skills to make a difference. Get ready to be seriously inspired!

BUSTING FEMALE STEREOTYPES

**KIARA BROWN, 16,
LEESBURG, VIRGINIA**

Kiara Brown still remembers that day in middle school when her class did a reading of a classic princess fairy tale. She was disappointed that the star of the story seemed so frail and weak. Wasn't the tale a bit, well, sexist? Fast-forward to a few years later, where Kiara was still wishing for a princess story with a more independent and confident heroine. "It was time for a change," she says. She decided to write, illustrate, and publish her own picture book for kids called *Princess Pretend* and *The Not Knight*.

When Kiara started typing, the words flowed, but she felt less secure about her digital design and illustration skills.



I was looking for," she says. Kiara also used a free website builder with simple templates to create the initial site for her burgeoning publishing company.

In Kiara's story, the princess learns she doesn't need to stick to other people's ideas about how she should act—and can rely on her smarts to conquer a challenge. The book also features a female knight who puts on a tough face, but deep down wants sparkly

glitter on her helmet. Kiara self-published her feminist fairy tale last year, and has visited classrooms to read the book to over a thousand students (see photo). "I'm so glad I can give kids this alternative to old fairy-tale stereotypes," she says.

So she taught herself how to use a series of online design programs to draw pictures and create page layouts. The learning curve was steep, but the process was super satisfying. "I redid each of the 80 illustrations about four times until I got the results

Photo courtesy of Kiara Brown



IS THAT SOURCE FOR REAL?

The first stories that show up in the results of an online search are the most trustworthy ones, right? Not necessarily.

What appears can vary, depending on a number of factors. You'll often find what you're looking for, but if you search for a very specific subject that lacks good

content on the web, you might see stories that match the words you entered, but are not authoritative sources.

And on social media, people sometimes share sites that contain false information, or are designed to deceive you with legit-sounding names.

To ensure what you're reading online is real, investigate

further. Look up who wrote the article and what organization they belong to. An Internet search may show there's no such person or place. Scan the story closely for where the source got the information: Does it have citations or links to real data? Who's sharing it? If they've spread fake news before, they'll likely do it again.

HELPING THE HUNGRY

**JONATHAN DANIEL, 17,
LITHONIA, GEORGIA**

Jonathan Daniel learned to love computers as a curious 7-year-old, when he tinkered with and repaired technology at home with his dad. So last year, when he had to use paper inventory forms in the food pantry where he volunteers, he knew there must be an easier digital solution. “I couldn’t find an app to easily tally the items we had, so I started sketching ideas,” he says. Jonathan had developed apps in the high school robotics league he competes in, but didn’t have much experience writing the type of code that could collect data and keep track of what was on the shelves of the food pantry.

He turned to free online spreadsheets as a model for organizing his data, then frequently consulted an online community of programmers to help him write the code. While the app was still in development, Jonathan enlisted other food pantry volunteers to field-test it and point out flaws. “At one point we realized that we would run out of a certain product and need to substitute a similar one, a function the app lacked,” he says. After making tweaks, Jonathan



Jonathan Daniel, right, chats with U.S. Representative Hank Johnson at the Congressional App Challenge Awards.

launched The Emergency Food Assistance Program (TEFAP) Tracker app, which won an award for his district in the 2017 Congressional App Challenge. He has plans to pitch the app to a wider network of food banks in the Atlanta area. But this tech-savvy teen is also ready for his next challenge—going to college to study computer science and launch a career as a software developer.

MAPPING VOLUNTEER GIGS

**JACK KUNKEL, 14,
WASHINGTON, D.C.**

Like many kids his age, Jack Kunkel looks for opportunities to volunteer, but he was surprised to discover that finding service projects wasn’t easy. “It was hard to find a place that was kid-friendly, to organize a ride, or even to sign up,” says the high school freshman. “So I decided to build a map to help kids volunteer.” The result: Built to Help, an interactive map with a vision to connect teens and middle schoolers with volunteer opportunities inside the Washington, D.C., beltway. Jack used a website design platform and a survey maker to build the site.

At first, keeping track of organizations that have kid-friendly volunteer opportunities—as well as those he still needed to investigate—



was a major challenge. So Jack used spreadsheets to organize all of his data. His biggest challenge so far hasn’t been a technical one, however; it’s been getting people to respond to him. “A lot of the time organizations don’t reply, so it’s a hassle getting a hold of

them. And people don’t take kids seriously,” he says. His solution: “I’ve stopped telling them I’m a kid in emails!” Jack taught himself the basics of a free online mapping tool, and is now partnering with a developer on an area map of nonprofits that welcome young volunteers. His goals for this year are to spread the word about his site via a dedicated social media account, grow his reach among groups with volunteer gigs for teens, and continue to pay it forward.

BRINGING HISTORY TO LIFE

**GRACE ALBERTI, 17,
SARATOGA SPRINGS,
NEW YORK**

It was her Polish heritage that drew Grace Alberti, a history and theater buff, to explore the role of women in the famous Warsaw Uprising of World War II. “Some of my relatives lived there, including some who’d disappeared, who’d spent time in labor and concentration camps, and who’d fought and died,” she says. A little known fact about the Nazis’ occupation of Poland: More than 20 percent of combatants who battled in 1944 to overthrow the Nazis were women.

When Grace couldn’t find an existing play about the role of women in the revolutionary events, the high school senior decided to write and produce one—and used digital collaboration to get the project done. She asked Lâle Davidson, a published writer and professor at SUNY Adirondack, and student Catie LeCours, 18, to be her coauthors on *Uprising*, a play about teen sisters who join the Polish resistance after their parents are killed.

The trio wrote draft after draft, trading comments and edits in a shared online document. Most of the source material that Grace found online was in Polish,



Grace Alberti, *right*, relied on digital tools at every step while writing and producing her original play.

so she relied heavily on a free online language translation service as well. After the script was complete and rehearsals began, she uploaded private videos of dance tutorials to loop in actors who missed a rehearsal. “Social media helped us spread the word about the show, and the cast set up accounts for each of their characters, which was supercool,” she says. Grace’s play had a successful premiere last June at Saratoga Springs High School in New York, and the cast performed several additional performances last fall. Bravo!

Photography by Carrow and Colasurdo

YEP, YOU CAN SOLVE THAT!

Maybe you have a digital idea of your own you’d like to bring to the next level, like a way to better organize your homework assignments or create a budget for your brilliant business plan. Try these tips for keeping your momentum going.



OPTIMIZE YOUR TO-DO LIST

Write down your goals, break them into manageable chunks, and make target deadlines for each. Digital tools can help—you can set calendar reminders on your phone to stay on task.



KEEP A SPREADSHEET

Find a spreadsheet template that meets your needs or customize one to your liking. Use it to keep track of all the details of your project, including key deadlines, important web links, contact information, expenses, and more.



CHECK OUT YOUR LIBRARY FOR FREE RESOURCES

You can find amazing digital tools at your local library, from peer-to-peer online courses to live tutoring in subjects you want to learn more about.



TRY A SHARED ONLINE DOCUMENT

A free auto-saving document, like what Grace Alberti used to write her play, can allow you and your collaborators to co-edit documents. You can share comments and ideas in real time from your own separate computers or phones.