

Advertising Supplement

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Kalamazoo Regional Educational Service Agency

Kalamazoo RESA supports students, educators and families across Kalamazoo County. Services include job preparation, special education, technology services, professional development, administrative services and leadership training.

Kalamazoo RESA Website: www.kresa.org

'For the first time my child gave me eye contact'

Kalamazoo RESA visual-impairment specialists create iPad app to aid interventions

When her son Colten was about 18 months old, Jennifer L. of Kalamazoo noticed some unusual vision behaviors. "He wouldn't look at things for very long," she explains. "He couldn't follow moving objects and he'd look at things from the side, peripherally. He loved to stare at lights. He was enthralled with staring out the window."

It turned out that Colten, now 3 years old, had all the characteristics of a cortical visual impairment, or CVI. In the more-common ocular visual impairment, there's a physical problem with the eyes' anatomy, which eyeglasses or contacts can correct. With a CVI, however, the brain has trouble processing what the eyes are seeing. Causes of CVI may include a lack of oxygen to a baby's brain in utero or during birth, or a head injury; it often accompanies other medical conditions. A child with CVI may have a normal eye exam, but they still suffer from impaired vision that affects learning ability. It also frustrates parents who wonder why their child won't look directly at them.

Now, thanks to Kalamazoo RESA vision specialists Stephanie Steffer and Julie Kushman, there's an app for that. Really. Steffer and Kushman are no Silicon Valley entrepreneurs, but it's easy to imagine their combined enthusiasm winning over a boardroom of techies. Inspired by Christine Roman-Lantzy, PhD, an internationally recognized CVI expert, Steffer and Kushman have embraced new research showing that children with CVI can actually improve their vision through specific interventions — if they're diagnosed properly.

Leading edge of research, treatment

"This is one of the very few eye conditions where vision can get better," says Kushman, an admitted "CVI geek" who listens to research while commuting. "Previously, services for this population of students involved just working on the other senses — tactile, auditory, etc. — to compensate. But now we're learning that with early interventions and visual adaptations, their vision can advance to near normal. So the faster we can provide appropriate intervention, the better for them. That's why our goal is to identify the kids with CVI in our county and begin interventions quickly. And since 90 percent of our information intake is through our vision, strengthening it is going to enhance their ability to learn." The two specialists currently have nearly 40 children with CVI characteristics on their caseloads, and they belong to a statewide team of vision professionals who work to build best practices for CVI under Roman-Lantzy's direction.

"Stephanie and Julie are leading the charge and digging in to CVI research that hasn't been done before," says Mindy



L to R: App creators Julie Kushman and Stephanie Steffer with Jennifer and her son Colten at WoodsEdge Learning Center

Miller, the Kalamazoo RESA administrator who hired them. "They've really educated themselves. They've pursued this outside of their regular work and they strongly advocate for these kids."

The duo's interest in finding the best possible CVI intervention system led them to the idea of developing an iPad application. Steffer's uncle Brent Kevern, vice president of LifeScience Technologies, had been working on an app to improve communication access between hospital patients' families and medical staff. Steffer and Kushman saw the potential in that concept and teamed up with him to create their CVI app, which makes use of LifeScience Technologies' system. The app is called LifeScience Technologies At Home Student Management System, or LSTAtHome for short. "We came up with the components. We told him we needed an educational part, that we needed data collection abilities — all the pieces. Then Brent actually created the app software," Steffer says. Now they have teachers and students' families trying out a prototype, to validate the documentation and data collection functions.

Just recently, they got exciting news: American Printing House for the Blind, the world's largest nonprofit producer of educational products and services for people who are blind and visually impaired, has expressed interest in carrying LSTAtHome. That would mean teachers all over the country could have access to it through federal funds.

iPad as multipurpose tool

Teachers for children with visual impairments have been using iPads with students for a few years now, but usually only for simple games where touching the screen triggers colors and sounds. The application Kushman and Steffer have designed goes much, much further. It turns the iPad into a multi-faceted resource for creating and delivering CVI exercise sessions, evaluations, data collection, setting goals, tracking the child's progress, gathering input from all

members of the support team and keeping everyone on the same page. With LSTAtHome, vision specialists, teachers and parents have common access to every component needed for consistent, customized treatment — and measurable improvement.

During a typical lesson, a child might view a video clip of a simple moving target or be asked to locate or identify a familiar target or to sort images into categories. These may seem like simple exercises, but they make it possible for students to use their vision for academic tasks — something they couldn't do before.

Remarkably, LSTAtHome actually tracks and records the child's eye movements on the screen, and tests how he or she visually responds to things like changes in illumination or an object's movement. With this information, the vision specialist can develop strengthening exercises customized to the student's precise needs.

By providing a way for the support team to share journal notes, video clips and photos of the child's sessions, LSTAtHome helps ensure consistent communication between school and home. That, in turn, allows for rapid adjustments in treatment based on what's working.

In the classroom, LSTAtHome makes it simple to incorporate treatment sessions into a child's day. "It's easy for teachers," Kushman says. "They don't have to dig a bunch of materials out of a closet; they just turn it on. It's a more natural integration. The child can get three sessions at school, then more at home with their parents." Another plus: The iPad can link to classroom smartboards, providing a bigger visual reference area for the children.

"This is groundbreaking work," says Angela Telfer, director of the WoodsEdge Learning Center for special-needs students. "It gives teachers the tools to help students with visual impairments utilize all of the vision they have. The benefits are huge, because it helps our students participate more fully in their education."

Results: Life-changing

Since Steffer started working with Colten using the prototype app, Jennifer has seen improvements. "I definitely see him starting to track more, and trying to look at me. He's aware of his surroundings; he knows what's going on around him more than before." She's eager to have the final product in hand. "I think it will be one of the best things for him. He likes it; it gets his attention. And it's amazing that we can communicate back and forth with Stephanie so easily through it. It will make a big difference for him, and for us at home, too."

Steffer and Kushman say they're overwhelmed with joy by reactions like Jenni-



Colten, age 3, views one of the exercises available on the LSTAtHome

fer's. "Getting feedback from parents, what they've seen their children do and how they've seen them grow, it's just amazing. Parents find it changes how their children are involved in their world and in their family," Steffer says. "We've had parents tell us, 'For the first time my child looked at me and gave me real eye contact,'" adds Kushman. "It gives me goose bumps, realizing that I can improve someone's vision and give them that much more access to not only their education but their everyday life, their well-being as a person."

"It's wonderful to be able to see students make such significant gains, and to see how it results in better access to the world around them," Mindy Miller says.

Thanks to the hard work of two selfless vision pros, many more students will be able to experience those gains — in learning and in life.

New path to high-school completion blends academics with paid work experience

This September, Youth Opportunities Unlimited (YOU) welcomed an inaugural class of high school students to a new pathway in the Education ReConnection program, which helps youth who've dropped out of school. Since the program began in 2009, students have had the opportunity to either work towards GED attainment or re-engage with their home school district to earn a diploma, all while receiving case-management and work experience services through YOU.

In recent years, collaborative research with community partners has shown that some of these students really need an alternative learning environment to successfully complete their high school requirements. So, in partnership with area school districts, Education ReConnection established a second pathway that allows students to work towards their diploma directly through YOU. The curriculum is enhanced by integrating employability skills and paid work experience with academics. Students spend part of their day participating in classroom-based and online learning formats and part of it engaged in work-based learning.

"The work component provides a monetary incentive now and important workplace skills for the rest of their lives," says YOU director Karen Carlisle. "Not only are these youth being connected with educational opportunities, they're also gaining employment skills and becoming more confident members of our community." Watch for more Education ReConnection news in the near future, Carlisle adds.

Scholarships, grants available from Education for the Arts

Irving S. Gilmore Student Arts Scholarships (\$80,000)

These are available to K-12 Kalamazoo County students for artistic education and enrichment beyond the classroom. Funds for the 2014-2015 school year will be awarded for private arts instruction, classes at arts institutions or summer arts camps and other arts activities. Deadline to apply: 4 p.m. on Jan. 23, 2014

Irving S. Gilmore Student Artistic Equipment Program (\$20,000)

These grants give artistically advanced-level students from Kalamazoo County access to equipment that is either not available through rental programs or is prohibitively expensive. Deadline to apply: 4 p.m. on Feb. 27, 2014

Get application tips before you hit "send!"

At our EFA Student Scholarship Application Workshop, we'll walk you through how to write a strong project narrative, create a balanced budget and put together support material. 6:30 pm on Jan. 8, 2014 at the Kalamazoo RESA Service Center, 1819 E. Millham Ave., Portage.

More information: (269) 250-9244 or kresa.org/efa.

Think you can't afford college? Think again!

We'll help you apply for financial aid

It's FAFSA time! Get no-cost help filling out your Free Application for Federal Student Aid (FAFSA) at any of these 10 events hosted by the College and Career Action Network. Trained volunteers will help parents and students complete the FAFSA application online. Don't miss this chance: It only takes 30-60 minutes! For more information, visit us online at www.cacanonline.org or call (269) 250-9313.

- January 30, 9am - 3pm
Dept. of Human Services; 322 E. Stockbridge; Kalamazoo
- February 9, 2pm - 4pm
MI College Goal Sunday; Western Michigan University, Schneider Hall
- February 10, 5pm - 7pm
Northeastern Elementary School Boys/Girls Club; Kalamazoo
- February 11, 6pm - 8pm
Comstock High School
- February 13, 5pm - 8pm
Parchment High School
- February 18, 5pm - 8pm
Portage Community High School
- February 19, 5pm - 8pm
Loy Norrix High School Library
- February 22, 10am - 2pm
Northside Association for Community Development, Kalamazoo
- February 24, 5pm - 8pm
Kalamazoo Central High School, Computer Room # 553
- February 28, 4pm - 7pm
Youth Opportunities Unlimited; 422 E. South St., Kalamazoo

What to bring

Student: Driver's License
Both Student & Parent(s): PIN numbers, if you have them; Social Security numbers; 2013 Federal Income Tax Return (spouse's if married); W-2 forms or other records of money earned; 2013 untaxed income records; Most-recent bank statements & other financial/investment records.



www.kresa.org

Education for the Arts (EFA):

250-9244

Education for Employment (EFE):

250-9300

Great Start/Early Childhood Programs:

250-9640

Head Start:

250-9845

Hearing/Visually Impaired Services:

250-9700

Instructional Services:

250-9210

Juvenile Home Schools

Intensive Learning Center: 385-8523

Youth Center School: 385-8549

Preprimary Evaluation Team (PET):

250-9670

Regional Educational Media Center (REMC 12):

250-9350

Service Center:

250-9200

Special Education:

250-9323

Valley Center School:

388-9494

WoodsEdge Learning Center:

250-9400

Young Adult Program (YAP):

250-9600

Youth Opportunities Unlimited (YOU)

Employment Services/
Michigan Works!: 383-2536

Kalamazoo: 349-9676

Three Rivers: 269-273-2717

Coldwater: 517-278-0200