



Each and Every Child

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Planting ideas

Hands-on gardening sprouts fruitful lessons for today, tomorrow

MASSENA – Ideas are growing big at the CAM Community School District's middle school. Literally.

Those ideas take root in a greenhouse on the middle school's campus, which

is central to the environmental class some 58 seventh and eighth graders take as an elective.

You can call it engagement. Enrichment. Whatever. The kids call it

fun, but with a caveat: If you are not performing up to snuff, you can get fired, just like in the real world.

The class is open to all, but it's the students on Individualized Education Programs who seem to benefit the most, teachers say.

"This is one thing they truly excel in," said special education teacher Paula Baughman. "It is hands-on work. In the past, we had a student with Down Syndrome, and he thoroughly excelled in the greenhouse. He was a great organizer."

Students learn to identify the abundant flora and fauna in southwest Iowa, grow produce and flowers in the greenhouse, and understand the environmental issues facing the state.

The coursework focuses on becoming better stewards of the land, said Dean



Photos by Iowa Department of Education's Deborah Darge

Science teacher Sandy Booker works with students to ensure the right plants are identified correctly.

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Downer, an industrial arts teacher.

"We introduce them to things like a butterfly garden," he said. "The essence is to teach them about the environment both in the outdoor classroom and the greenhouse."

The course also is designed to reflect much of the real world of business. Seventh graders take on new employee roles, while eighth graders become supervisors.

"The eighth graders get supervisory roles where they are in charge of other kids," said Sandy Booker, the middle school's general science teacher. "They need to learn that at some point in time, they can move up the ladder. This gives them a start."

"The idea of the course is that we expose them to many different things, not just environment but life skills," Downer said. "You can go into greenhouse management with a two-year degree."

It's drilled into the students that they could be "fired" for major transgressions, such as being disrespectful or not following through with orders. The threat, while not empty, has been 100 percent successful: Not one student has ever been fired in the 16 or 17 years the class has been in operation (there is good-humored disagreement as to when it actually started).

The real-life approach has caught parents' attention, as well.

"We talked with one set of parents earlier this year whose child was going to be a supervisor and they thought that would be very good for his work," Booker said. "It's hard for him to get away from cattle (the family's livelihood) to get to use his

skills in different areas, they told us. He understands everything that we are doing. He can explain what we are doing and why we are doing it. It gives him a broader sense of interest. If he goes into the cattle business, he will want to know about plants. His plan is to go to a junior college."

But make no mistake, academics is the central part of this class. Science, mathematics, communications are all vital to the students' success. Tangentially, they also learn marketing, economic and sales concepts.

They also are responsible at the end of the term for doing a classroom presentation on something they learned on their own.

"They have to do a presentation of an animal from North America," Downer said. "Seventh graders have to give five-minute presentations and eighth graders, seven minutes. You can't believe how proud they are."

By semester's end, the students have to put all of their newly acquired knowledge to work when they host a community sale in which they sell the goods they had been growing.

"Now we are coming across communication," Booker said. "The sale makes them communicate with the public. They are also going to handle money."

Last year, the school made over \$2,400 during the sale, which precedes the Mother's Day weekend. Everything from hanging flower baskets to pretty much any vegetable is sold.

Anything left over goes to the students, who usually take them home for their own use. A few entrepreneurs, however, take their wares to the farmer's market in Anita (the market waives the vendor



Mason Chester



Sage Erickson



Natalie Blaine



Paula Baughman



Sandy Booker



Dean Downer

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fee for the students).

Baughman said the class is just what her students need.

"It teaches them life skills, being responsible, dealing with money, taking on a role," she said. "It's getting them ready for high school."

"It forces kids to take ownership," Downer said. "If kids mislabel a plant or forgot to put on a label, then we have to put the plant on the 'we don't know' table and we lose money. And the kids really understand that."

It's clear that at least three of the students on IEPs have learned quite a bit from the class. Eighth grader Sage Erickson has learned how to effectively prune trees without damage. Eighth grader Mason Chester knows how to tell the difference between bobcats and whitetails out in the country. And seventh grader Natalie Blaine has a

better understanding of the habitat of two neighboring pheasants she has named "Bob" and "Rosie."

But get them out in the greenhouse and they become clearly animated. It's transplant day where seedlings are being transferred to pots.

"You have to brush off the dirt from the roots this way."

"You want to put these plants here for your hanging basket."

"This is getting too much water."

Each exploits their own individual talents.

"Natalie is very picky about how she does the plants, so she is a natural for transplanting them," Booker said. "They all have their gifts."

Growing produce. Growing minds.



Name of plant	Date planted	Germination d
Grandwine Pink Fruited Tomato	3-11-16	3-21-
Tomato Big Red Cherry (H)	3-11-16	3-21
Prison Cushion	3-11-16	3-21
Red Hawk Tomato	3-11-16	3-21



Minimizing the 'summer slide'

Asking the expert: Tips for summer to make a happy fall

Teachers dread it every fall: Students return, and then educators must spend up to a month-plus re-educating their charges on what they had forgotten over the summer. Called the summer slide, we asked Deborah K. Reed why it happens, and what can be done to minimize it.

Reed is the director of the Iowa Reading Research Center, which was created by the Legislature for the express purpose of improving literacy proficiency in students from preschool through high school. The center is conducting research in practical settings in order to evaluate the effectiveness of literacy practices and the usefulness of assessments for guiding literacy instruction.

Reed earned her Ph.D. in special education at the University of Texas at Austin. She spent the first 10 years of her career as an English language arts and reading teacher and preK-12 reading specialist. She has developed numerous instructional materials and professional development programs on evidence-based literacy practices, particularly for middle and high school students.

Reed was awarded the Council for Learning Disabilities' 2010 Outstanding Researcher of the Year award, served as the chair of that organization's Research Committee from 2012-2015, and is now the vice president.

1. The summer education setback, which results in teachers having to re-teach content and skills in the fall because students forgot lessons from the spring term, is particularly pronounced among the special education community. Why is that?

Students who are experiencing learning difficulties (including those with disabilities and those who are still learning English) benefit from continuous instruction. Research evidence suggests that discrete skills and content, such as sight word knowledge and math facts, are better learned and maintained with consistent and distributed opportunities to practice under teacher guidance. That kind of steady learning is better than a single, long period of "cramming." More complex skills, such as reading comprehension and problem solving, take more time to develop with a variety of materials. In addition, students who find certain skills difficult are likely to avoid them, so they do not choose to read or seek out academic activities in the summer. Whereas, their peers who are doing better in school may take advantage of incidental learning opportunities in the summer such as voluntarily reading or enrolling in a Science, Technology, Engineering and Math camp. This could mean that the gap actually widens: The less able students forget some of what they learned while the more able students learn a little bit more.

2. Is the summer setback as prevalent in older special education students as younger ones? If not, why is that? If so, why is that?

People of all ages and abilities are prone to forgetting knowledge and skills they do not practice. Whether or not a summer setback is detected among older students, depends on the kinds of skills being measured. A skill such as fluency tends to be fairly stable above grade 5 but vocabulary words, historical information, or scientific concepts could be forgotten.



Deborah K. Reed

3. Do you have to take a different approach with older students than with younger ones?

Students of all ages need developmentally appropriate instruction in the summer — just as in the regular academic year. Younger students can spend less time concentrating on a task in a single sitting, so an extended block of summer school time would need to be broken into segments of various activities. Adolescents tend to need more motivational supports, so the summer program might need to offer more choices and enrichment opportunities. At any time of year and with any students, the success of an intervention depends on how closely it is aligned to students' specific needs. If the summer program is intended as another opportunity to intervene with a student experiencing difficulty, then the instruction should be as targeted as possible to make the most of the available time.

4. What can teachers do to help minimize the setback?

Students are less likely to forget knowledge and skills they master and move into long-term memory. Ensuring that students do more than commit facts to short-term memory or learn

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content superficially will help prevent a summer learning loss. Teachers also have created reading lists, challenge activities, or community excursions for students to do in the summer.

5. What can parents do?

Make reading a habit in your home. Just 20 minutes of reading can expose children to 10,000 words a day. This would add up to 750,000 words in 75 days of the summer. Not only would students gain word knowledge, but they also would be exposed to ideas and information that serve as the building blocks for more advanced learning. The Iowa Reading Research Center's blog offers other ideas for parents to support their children's literacy: <http://www.iowareadingresearch.org/blog/>.

6. Children will be more interested in reading if they are directed to subjects they enjoy. How can one go about helping students find topics that interest them?

Work with your community or school librarians. They are the experts at tapping into children's interests and connecting them with available reading materials. The other important part of helping students find interesting books is to read a lot of books yourself, including books your children or students would read that might not otherwise interest you. Get to know what is out there for the right age and ability level. Then, be able to talk about what you and your children or students are reading.

7. What would you recommend, overall?

The IRRC is conducting a research study to provide clearer guidance to schools on effective summer reading programs. Until we have those

results, I am reluctant to make specific recommendations. In a general sense, we know that summer can be a part of the continuum of services provided to students experiencing academic difficulties. One of the things that often gets overlooked in our search for what to do, is what we say and show to children and adolescents. Casual comments can often make a negative impact on the way a student approaches learning opportunities. For example, saying, "I was never any good at math either," might be taken as an indication that the subject or skills are a waste of time — particularly

precious summer vacation time. A more supportive comment might be, "I had to work really hard at math when I was your age, too. This is something we could both get better at, so I'm willing to learn if you are." We also show children and teens what is important by what we choose to do. Do you model being a reader every day? Do you demonstrate enthusiasm about learning new things? These are important parts of creating the environment in which students will persist through a difficulty and develop the habits associated with lifelong learning.



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Making prom special – Muscatine High School students dance with Abi Frye during last year's Muscatine High School's prom. The toned-down prom was held an hour before the start of the second prom. The music was played quieter, and there were no flashing lights, but that didn't stop the group from hitting the dance floor. Prior to the start of the dance, the students had their photos taken along the riverfront and had dinner at Boonies in downtown Muscatine. Students were welcomed to the second prom, if they wanted to go. The school is repeating the toned-down prom this year.

Life in the fast lane

A disability doesn't slow her down

OTTUMWA – Ottumwa eighth grader Maria Horn likes sports. That's apparent from her participation in track. Basketball. Hand-cycling. Rock climbing. Archery. Tennis. Just to name a few.

Maria stands out not just for her diversity in sports, but also that she has spina bifida.

Clearly, that hasn't slowed her down.

If you ask Maria why she participates in sports, she will tell you it's because she likes hanging out with friends.

What the eighth-grade Evans Middle School student won't tell you is that sports is teaching her to advocate for herself, and giving her strength and confidence. That prospect seemed bleak, at best, just four years ago when Maria was in a Bulgarian orphanage.

Her mother, Katherine, puts it in perspective.

"Maria came home when she was 11 years old," she said. "She never had the opportunity to really question why things were the way that they were. She would often go along with whatever the adult in charge said. I knew that she needed to find her voice and be able to state what she needed and what she wanted. As she has

learned what to expect living here in the United States, she has begun to question things more."

For Maria, sports is a gateway to empowerment.

"It is also giving her life skills that she needs for the future, teaching her about team work, setting personal goals and showing her how hard work can pay off," her mother said.

On the track, Maria specializes in the 100-meter run, said her coach, Jennifer Burton. Using a lightweight, three-wheel chair, Maria propels herself along the track.



Maria Horn

"Our hope is to help Maria get faster and stronger so that we may add the 200-meter in the future," Burton, herself a former special education teacher, said. "Doing the 200-meter is a little more difficult for us all because it involves a curve where Maria would need to turn the chair while racing and we would need to ensure the wheel on her racing bike is set correctly."

In that Maria is the only wheelchair competitor, it requires even more motivation than her team mates.

"We talk about how she can push herself and better her individual times," Burton said. "She is quite the competitor and really does her best each and every

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time she is on the track."

That determination and discipline extends into the classroom, said Gina Walter-Dunn, the Evans special education department head and instructional strategist.

"She is very determined to get things right," Walter-Dunn said. "She wants to do her homework and be held to the same standards as everyone else. Teachers have said if everyone tried as hard as Maria, Ottumwa would be the best school district in the state."

Walter-Dunn is truly amazed at Maria's indomitable spirit.

"Some days after school, she will go off to practice archery," she said. "Then it's off for basketball practice. Then, she may even go rock climbing. Really, she makes me feel lazy!"

Katherine Horn is wholly impressed with the Ottumwa school district for their work with Maria.

"The athletic director and coaches have really included her in ways that others haven't in the past," she said. "That is something that Ottumwa has been amazing at."

