



ChiS&E

Chicago
Pre-College
Science and
Engineering
Program

PARTNERS IN LEARNING

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ChiS&E CEO Honored

LaTina Taylor, ChiS&E Instructor

"I'm a proponent of the program ... this is what our kids need."



During the current session she's devoted to technology exclusively, teaching both parents and children.

"I haven't seen anything like this in my 17 years," she declares. "Where parents and children are sitting and learning together – especially science and technology!"

Taylor is completely sold on the ChiS&E program because she has seen how empowering it can be. "As I started to understand the high level of learning the students would be involved in, I saw the value in it. This is what our kids need."

When not spending her Saturdays at ChiS&E, LaTina teaches an after school program to 6-8th grade students at Eli Whitney called "Underwater Robotics."

The program involves constructing of underwater vehicles based around a theme. Last year's theme was the gulf oil spill for which her 6th grade students took second place in a regional competition against older high school students, a great badge of pride. This year the theme is World War II shipwrecks. Using Google earth software, the students researched and made a timeline of all the spills that ever happened in history.

LaTina Taylor's enthusiasm for teaching and learning is infectious. When the lead technology teacher at Eli Whitney School on South Komensky talks about science, especially, the excitement is palpable. "In my perfect world, I'd be in a lab all day!" she proclaims. How fortunate for her students at both Eli Whitney and the ChiS&E program where she has been an instructor since its inception that she's not.

A public school teacher for 17 years -- more than ten in technology -- Taylor became involved in the ChiS&E program when her school's principal suggested she consider an engineering program the school was participating in. She agreed and wound up helping to write both the student and the teacher curriculum. The first two years she taught first grade science and technology.

LaTina Taylor is exactly the kind of teacher students need. Committed and imaginative, she believes in exposing youngsters to new ideas and concepts. She believes in team building, discussion and hands-on activities. And she believes in parental involvement – all the things that define ChiS&E. "I'm a proponent of the program," she says. "It's a different type of dynamic. I think it's great."

PROGRAM UPDATE

Implementing a Theory of Change ChiS&E Receives Affirming Evaluation of Program

"Chi S & E is creating a supportive environment for science."

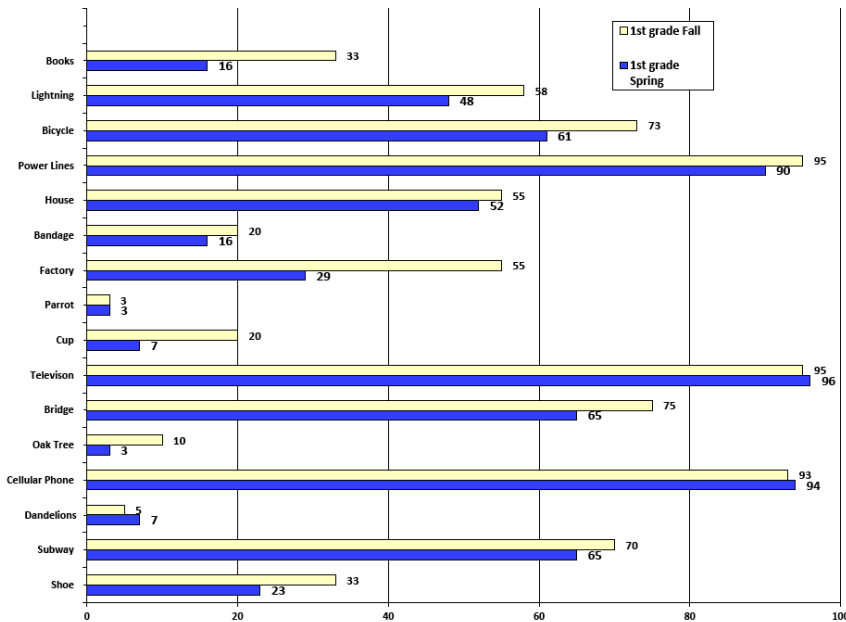


Figure 1. First grade parent response Fall and Spring "What is Technology?"

summer of 2010. For the entire first year, consultants Maurice Samuels, Ph.D., lead evaluator and David Beer, principal investigator at CEMSE, conducted an independent evaluation of ChiS&E to determine the extent to which the program is reaching its goals. Researchers conducted interviews with African American and Latino parents, first and second grade students and staff members. In addition, questionnaires designed to measure their conception of technology and engineering were completed by 101 students in first and second grade, and 166 parents. Parent orientations and training sessions were observed, and program documents such as parent training handouts, attendance records and program parent questionnaires were reviewed.

Some of the comments made by parents were

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The Chicago Pre-College Science and Engineering Program (ChiS&E) is successfully "implementing its theory of change." That was one of the key findings by the Center for Elementary Mathematics and Science Education (CEMSE) at the University of Chicago in their year-long evaluation of the program. "The program has ... mentored ChiS&E teachers," they wrote. "... developed Saturday morning sessions for families, and provided parents with training that supports their child's development both emotionally and mentally."

Other key findings were:

- The program is building parents' capacity to support their children's development.
- The program is preparing students to participate in the STEM (science/technology/engineering/mathematics) fields.
- DAPCEP staff is preparing ChiS&E teachers to effectively engage students and parents.

Evaluation of the program began in the

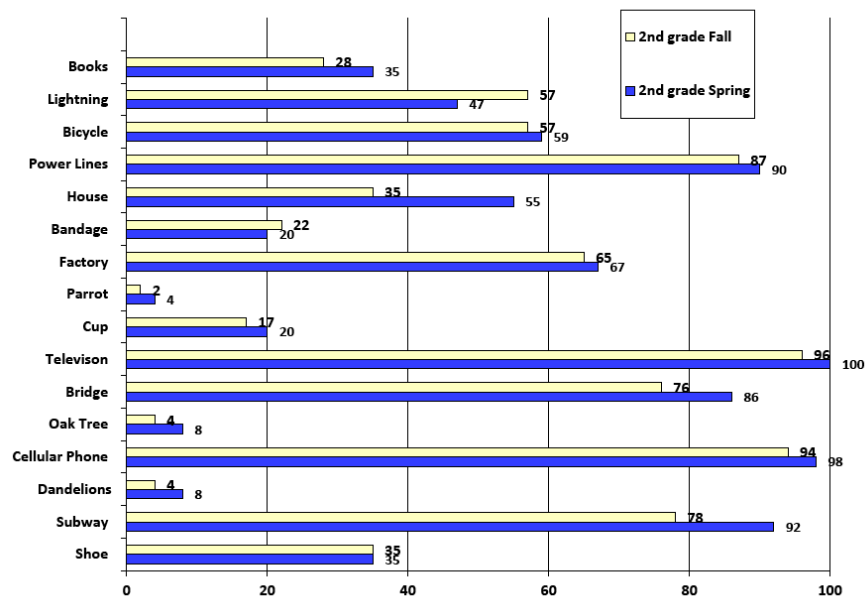


Figure 2. Second grade parent response Fall and Spring "What is Technology?"

PARTNER PROFILE

Darryl D. Bright, Parent/ Parent Recruiter

“To impact the child, you have to empower the parent.”



Darryl D. Bright is a man certain of his mission. The father of seven year old Duajuan M. Bright, a student at Spencer Technology Academy on the West side, he has been involved in the ChiS&E program since Duajuan was in kindergarten. Bright was working as a parent volunteer when the science teacher at Spencer suggested Duajuan participate in the ChiS&E program. Bright didn't

hesitate even though initially he and Duajuan relied on the science teacher for transportation from the West side to the South side. Later, they would ride the bus – rain, snow, cold or sleet – to participate in the program.

It didn't take long to see results. A bright child dealing with hyperactivity, Duajuan took to the program like a fish to water. “He loves it,” Bright declares. “To see my son learning these things at a very early age is something.” He's also seen a marked improvement in Duajuan's regular class work due to the ChiS&E program. Duajuan is learning about matter and physical change and other scientific concepts that Bright himself says he didn't learn until the 4th or 5th grade. As a result, Duajuan earned six A's and a B on his recent progress report. The program has also strengthened their bond. “Homework requires parental involvement. You have to be there with your child,” he says.

Because of his passion for the program Bright began recruiting other parents' participation. Spencer School Principal Dr. Sean Jackson recognized his enthusiasm and made it possible for Bright to do what he does very well and receive a stipend for it. As a parent recruiter, he can be found holding orientations at schools and special events wearing the ChiS&E tee-shirt and touting the program. He's recruited five families to date and plans to bring in more; he has a waiting list of parents who want to participate.

Part of Bright's recruitment tools is a video about ChiS&E that he produced as part of his own learning at ChiS&E. “Parents are learning too while working with the students. I learned how to use pictures and power points to make a film using Movie Maker,” he says. “To impact the child, you have to empower the parent.”

“I had 3 students that were in Chi S & E. I noticed especially during science class they were more active and they were participating. When I started a unit and I was shaping their background knowledge they already knew a lot about the topics I was going to talk about. I remember when we were talking about matter and a student said liquids and solids and gases and I was surprised because she was one of my quiet students.”

-Teacher

ChiS&E CEO Kenneth Hill Honored at Education Recognition Ceremony



On Saturday, July 30, 2011, ChiS&E founder and president, Kenneth Hill was honored with the Outstanding Administrator Award, at the 7th Congressional District's 15th Annual Education Recognition Ceremony. The award was presented for his continued commitment to educate youth.

"Many applications were received," said Congressman Danny K. Davis, "however, yours stood out amongst the rest." The ceremony and luncheon was held at RUSH University Medical Center, 1725 West Harrison Street in Chicago, Illinois. 🏡

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"My child loved the magnetism activity today. He really enjoyed the experience and wanted to know how to get some of the supplies that were used today. He wanted to explore more with the magnets. It makes me feel good to see my child so excited and in terms of something so educational."

"This has been an exceptional day today; parent- student activity was wonderful and informative. The program is a great opportunity for my son to expand his horizons and education opportunity. Great location. Topic in the parent session was very informative."

CEMSE also made several recommendations, including additional professional development throughout the year to support Chi S&E teachers and further consideration regarding the development of master teachers (DAPCEP).

ChiS&E provides highly engaging age-appropriate, hands-on science and engineering activities for Chicago Public School (CPS) students in grades K-3 and their parents. In addition, ChiS&E incorporates digital communication and cyber learning training to prepare children for the science, technology, engineering, and math (STEM) workforce of the future. 🏡

"I want to tell my friends all about (it). I want to come back next week because it's fun. I've learned about solid, liquid, gas, and physical change; a solid is something hard, liquid is something you can drink."

-1st grade student

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