

## Mad Science makes good sense

By ROBIN BECKWITH

"What's great is when you're working with children and you can almost literally see the light bulb go off over their head when they get something," Shari Penner Riesenfeld is talking about science, and in particular about Mad Science. What is Mad Science? "We teach children to love to learn science," says Mad Science Greater Houston area franchise owner and president Riesenfeld, "because science is something that teachers and kids are a little bit afraid of."

Twelve years ago, Riesenfeld became a single mom and sought to find a business that suited her enthusiasms, her retail sales experience, and her need to be flexible for her two children, then

aged 3 and 5. "I went to a franchise broker," she explained. "When I saw Mad Science, I knew I could sell it." Riesenfeld became Mad Science's seventh franchise owner, purchasing the Houston-area business from Ariel Schlein, founder of the Montreal-based firm.

Now she has a behind-the-scenes support staff of 10 and 60 Mad Scientists.

According to a recent Time magazine article, by the time children start studying science, their natural curiosity as potential scientists has most likely been squashed. In addition, although U.S. students' math and science scores are not plummeting, other countries' scores are soaring. "Perhaps more important than the struggle of U.S. students to keep pace with their international peers," the article stated, "is their failure to keep



SHARI PENNER RIESENFELD

up in enthusiasm for the subject."

This is exactly the phenomenon that Mad Science tackles daily. "Our goal is to instill in each child a love of science by showing them that there is science in everything around them," Riesenfeld said. "Everything they look at, everything they encounter on a daily basis" reflects some aspect of science.

There are 184 Mad Science franchises worldwide, operating in 23 countries. Riesenfeld's has been the largest grossing franchise in the U.S. for the past three years. "We are an approved vendor for every school district in the Greater Houston area," Riesenfeld explained. Mad Science also works with private schools - whether secular or religious - home school co-ops, Boy and Girl Scouts, and summer camp programs. "We also do large-scale events, such as the Children's Festival and the International Festival," she added. In addition, her franchise has worked with Space Center Houston, writing and producing a summer program called "Yuckapalooza." "We did 492 shows," she said. The company also puts on shows at birthday parties - more than 500 last year, reaching 10,000 kids.

The Mad Science Group is a member of the National Science Teachers Association, the American Association for the Advancement of Science and the National Association for the Education of Young Children.

According to Riesenfeld, Mad Science is in about 300 Houston-area schools at the moment. "We see upwards of 5,000 kids every week in an after-school capacity," she explained.

Generally, Mad Science programs are extracurricular, although they also can be brought into a school during the day. "We involve teachers when we come in during the school day," Riesenfeld said. "We give the teacher support materials." The pre-packet says what the Mad Scientist is going to cover, introduces teachers to the vocabulary, and "gives them some things to do before we get there," she said. A post-packet lets teachers know how they can tie the topic covered into other disciplines, such as language arts, social studies, or history, and also includes a reading list.

At this time, Riesenfeld does not have a facility where Mad Science can be held. "It's on my wish list to one day have four Mad Science laboratories," she commented. "But if you can get 12 kids together and a location, we'll come and do programs for you."

There are more than 100 topics covered in Mad Science workshops/classes. For example, "Kitchen Chemistry" introduces students to "the virtual laboratory we call a kitchen, in a novel and practical application of science." "Current Events" "takes a tour on the electron freeway,

conductors, insulators, transistors, and other elements in the work of circuit electricity introduce themselves to students via a tingle in their fingertips and a twinkle in their eyes." "It's Cool to Be Tobacco-Free!" graphically shows the effects of tobacco use on the heart, lungs and arteries. Five-week and 10-week pro-

grams tackle topics covered in the Texas Assessment of Knowledge and Skills test that now covers science in the fifth grade. "Mad Science has been proven to help students' TAKS science scores," Riesenfeld said. Fees for such programs are paid by either the schools or Parent/Teacher Organizations.

Her main concern - that goes well beyond simply maintaining a business - is sustainability in the after-school arena, particularly in inner city schools. "We can't go out for funding, because we're not a nonprofit," she explained. "We do reduce our prices for lower-income schools, which helps." The franchise relies on parents' and educators' enthusiasm for the kind of hands-on science experience Mad Science provides. Currently, most of these programs are funded by grants such as 21<sup>st</sup> Century, CASE, or the Mayor's ASAP, but these funds are limited and decreasing. Like ballet, piano lessons, or soccer, parents can also sign their kids up for a Mad Science after-school program at other schools, such as Purler, located in the Meyerland area. According to a study Mad Science conducted, "kids exposed to Mad Science do internalize scientific concepts better than kids who were not," Riesenfeld said.

Mad Science works with preschoolers, with elementary school children up to about sixth grade, with summer schools, with libraries and with parent education programs. The franchise also customizes to particular needs. For example, the company has prepared Mad Science with a Jewish theme for the Jewish Community Center, for Beth Yeshurun Synagogue's Malev School, and for preschoolers at Temple Emanu El's Becker Early Childhood Center; works weekly with M.D. Anderson Cancer Center kids; and has worked with special needs kids with MS, cerebral palsy, or autism. "We don't adjust the science," Riesenfeld said, "but adjust the means of teaching it. As long as we know our audience, we can teach them."

Mad Scientists and their aides come from all backgrounds and all walks of life. "Being a Mad Scientist aide is a great opportunity for high school students," Riesenfeld explained. "It's particularly helpful for those who want to go into theatrics, science or teaching." Predominantly college-aged kids are hired as Mad Scientists, but "we also get retired school teachers," Riesenfeld explained. "A lot of teachers become Mad Scientists during our summer schools and summer camps. You've just got to love science, be good with kids, and make science fascinating. The bottom line is just making it fun."

For information, call 713/663-7623, or go to [www.madscienceofhouston.com](http://www.madscienceofhouston.com). □