



# Harnessing the Power of Curiosity

## Our Guiding Principle:

People are intrinsically curious. Wonderergy creates a fun, safe, social opportunity to explore and satisfy that curiosity. Curious customers become *interested* customers, adding value through increased understanding, while building positive associations for new and existing products.

## What can Wonderergy add to your event or exhibit?

Wonderergy develops fun, interactive ways to inspire curiosity about *your* product and the science that makes it possible. We attract crowds and build value for new and existing products through self-motivated hands-on educational experiences. You invent it; we'll explain it.

## What services does Wonderergy offer?

Wonderergy will adapt to your market's needs. Your solutions may include:

- Live interactive shows and up-close educational entertainment
- Custom-developed hands-on activities exploring *your* science
- Exhibit and informational content development
- Staff training and on-site support



## How will Wonderergy accomplish this?

- We hit the books and learn about the science of your products, services, and market
- We boil down a simple, coherent message and build a solution around it
- We work with you to choose a solution that fits your budget and needs
- We may adapt our wide array of existing modules
- We may develop new media and activities for your company
- Our team of scientists appears live at your event

## What does Wonderergy uniquely add to your product?

- **Understanding** – The more your customers know about your product, the more value they will get from it and the more accessible and interesting it becomes.
- **Positive associations** – Customers feel good when they learn. Be there when they do. Better yet, be the vehicle for their satisfaction.
- **More impressions** – Our methods encourage interaction and curiosity in an unforced, voluntary manner. This stuff consistently draws a crowd.
- **Deeper impressions** – Self-motivated exploration leads to greater attention, interest, and investment.
- **Empowerment** – Educated consumers make better customers. Give them knowledge that they will take with them and use every day.
- **Differentiation** – Stand out in a market of traditional sellers. *Do something different.*
- **Market Accessibility** – Everyone is curious. Our methods are applicable to a wide range of audiences, including teens, skeptical adults, and more.

## What sort of technical expertise does Wonderergy have?

Wonderergy is a diverse team of scientists who love to explore and share their excitement. Our team brings together graduate and undergraduate backgrounds in: chemistry, physics, bioengineering, computer science, marketing management, education, and theater as well as expertise in polymer chemistry, cooking, music, sports, lighting, carpentry, writing, aeronautical engineering, and more.



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## Case Studies

### Custom Development

#### VGXPO: America's VideoGame Expo

##### Our Challenge:

We were asked to attract the attention of 15-24 year-old gamers who came to the VGXPO to play, to socialize, and to show off or learn new gaming skills.

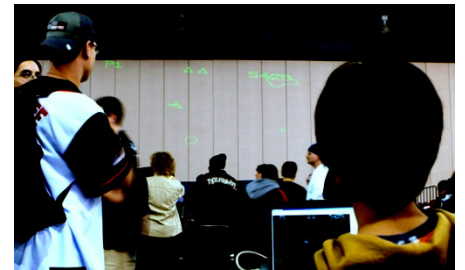


##### Our Approach:

Our target market might not be willing to ask science questions in this social environment, thus we needed a centerpiece to attract and maintain a baseline crowd, so that others would approach – ideally, something people would be willing to wait for. We needed a game. A BIG game.

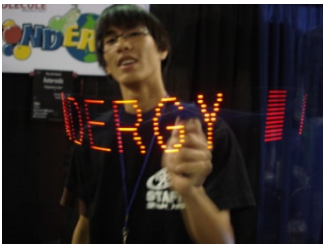
##### Our Solution:

Our answer to the VGXPO's challenge was to offer a 25-foot laser projection of the classic game *Asteroids* as our centerpiece. For over 6 years, Wonderergy has offered an expertise in Laser Show projection and while we occasionally present traditional "laser shows," we primarily use it as a centerpiece around which to explore the science concepts that make it possible. Thus Laser *Asteroids* was a clear fit as a centerpiece. We filled a 20-foot booth with equipment related to the science of laser shows and Wonderergy Scientists who really knew their stuff. In addition to the laser projection of *Asteroids*, the booth offered "fire-spinning," color mixing, a demonstration of the inner workings of a laser, and a sample of toys that worked by the same principle as the laser projection.



##### Our Results:

*Asteroids* and the educational activities in the booth attracted constant crowds. Multiple simultaneous activities allowed for many people to hang around and try their hand at everything, without losing interest. The good-natured competition of *Asteroids* and the interesting exhibits created a large number of repeat visitors to our booth. Young and old alike were attracted to our "mess with our display" area. Skilled fire-spinners gave impromptu shows while novices felt safe enough to test their skills. Our staff helped conference participants relate their experiences to the laser show, explaining that *Asteroids* game worked by moving just one laser dot around very quickly. Guests were often so surprised that they asked us to pause the game laser to prove it, an example of the participant-driven experimentation that we encourage.



As we expected, guests were as engaged with learning as with our giant video game.

##### Our Client's Response:

*The science of video games; what a cool idea! You reached our target audience perfectly. This is not just kids stuff. Your giant Laser projected Asteroids game attracted a consistent crowd, and could be seen throughout the exhibit hall. I was amazed by guests' interest in the educational side of things. Kids, Adults, and even teens and 20-somethings were showing off their skills with spinning and color mixing, teaching each other how different demos worked, and asking lots of questions about the science of it all.*

*I also wanted to thank you for your contagious enthusiasm and your flexibility, making this event the best that it could be. Your flexibility with schedule changes and load-in dynamics made our jobs much easier. The volunteers we sent you came back raving and demanding to work with you for subsequent days. Your participation in VGXPO added both a highlight and a unique aspect to our event at the Philadelphia Convention Center. Thank you for making our convention interesting and exciting!*

Ed Fleming  
President, VGXPO: America's VideoGame Expo



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# Case Studies

## Custom Development

### Phi Theta Kappa – Honor Society *Middle States Regional Convention Keynote*



#### **Our Challenge:**

We were asked to develop a program for college honors students 26-45 years old to address their themes of “The Paradox of Affluence” and their environmental service topic of “Keeping America Beautiful.” To add to the challenge, we were given only three weeks to develop the program.

#### **Our Approach:**

The event coordinator had called us because she wanted something exciting and engaging for the conference. We were determined to include both of their themes to maximize the impact of our message, rather than only addressing environmental science. To maximize our impact, we needed to create interactive hands-on sessions for small groups, while also reaching over 250 attendees with a keynote address.

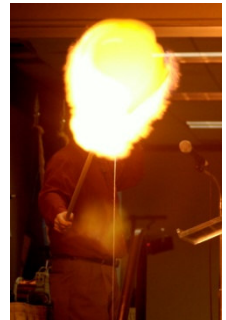


#### **Our Solution:**

Our response to the challenge presented by Phi Theta Kappa was a keynote focusing on power conversion and a workshop looking deep at the inner workings of everyday consumer electronics by pulling them apart. The take-apart session helped to combat current trends in technology: increasingly opaque technology; we rarely see what's inside our gadgets. Throughout the session, participants discovered amazing things about the products they use every day. The session focused on the environmental impacts of electronics when they reach their “end-of-life” and how we can make better corporate and consumer choices to reduce harmful “e-waste.” Additionally, multiple spontaneous opportunities were found for electronics education based around the parts

seen in the objects being destructed.

The keynote address focused on power generation, both electrical and sociopolitical power. The speech incorporated explosions to illustrate uncontrolled power generation, audience members generating their own power, analogies to effective power usage, and ties to the themes discussed in the take-apart session.



#### **Our Results:**

The take-apart session created a new sense of ownership of participants’ devices and choices. Despite the wide range of high-end electronics available for disassembly, one participant was thrilled to learn how a hair dryer worked, so thrilled, in fact, that she was inspired to create her own work of art out of the detritus. Multiple participants were similarly thrilled with taking apart discarded telephones. While everyone was engaged with their own object, everyone shared what they found between themselves, comparing and contrasting the insides of various devices. The session also provided much-needed therapy and fun

through a rare opportunity to treat electronics in ways we often wish we could.

The response to the keynote address was similarly positive. Despite having events until 3 am the previous night and a speaker from 8:30-9:30 am, the audience was engaged and responsive during the whole address, laughing along with the jokes and asking insightful questions. Depth of impression was such that audience members immediately asked if we could present at their respective colleges.





## Case Studies

### Custom Development

#### Motorola

##### *Making Waves Festival*



Motorola had traditionally hosted a "Family Fun Day," which invited employees and local community to visit the Motorola Museum of Electronics in Schaumburg, IL. The problem was that the activities were generally unrelated to Motorola. Ken Fink was brought in to change this.

The Fun Day activities were revised around a central concept: Motorola is all about making and manipulating waves (sound waves, light waves, and radio waves). The Motorola Museum's semi-circular upper floor was turned into a giant cello, with piano wire and sounding boards and a giant laser oscilloscope projected on the ceiling. Extra restrooms were converted into temporary light and sound labs. Participants formed a human FRS-based fax machine and had an FRS based scavenger hunt. There were over a dozen activities, largely staffed by volunteers.

The re-vamped Fun Day was so well received that tales of its success went all the way up to the Chief Learning Officer, who asked for more. This is how Wonderergy began.

#### Lockheed Martin Commercial Space Systems

##### *Communicate! The science of satellite communication*



Wonderergy was asked to provide programming for Lockheed Martin's Young Minds at Work day. Following a similar process to Motorola's, we got to the core of LM's technologies: satellites help us "talk farther." The keynote began with a simple message and a challenge to deliver it farther and farther. The program progressed from hand-delivery to spinning magnets, which grew into radio and eventually our own indoor satellite to rebroadcast sound over light waves. Later activities included adaptations of Wonderergy's existing offerings: *Centrifugal Circus* to explore how satellites stay in orbit and *CoolScience* as an extreme conditions room where we froze and boiled materials with liquid nitrogen.

The response to the program can be summed up by Joe, an electrical engineer for Lockheed Martin:

*"My daughter and I saw two of your shows at the recent Young Minds At Work program at Lockheed Martin in Newtown. We both loved it. I'm an electrical engineer, and well versed in the subjects I saw you explaining, but I thoroughly enjoyed your demonstrations all the same. And, I can appreciate the difficulty of making these topics engaging and comprehensible for children without sacrificing accuracy, and you guys have done a great job of it. Einstein said 'Everything should be made as simple as possible, but not one bit simpler,' and you were obviously listening. You have succeeded in taking complex concepts and bringing them down without dumbing them down, and that is an admirable achievement."*





# Case Studies

## Custom Development



### The Philadelphia Phillies

**Phillies Extreme Ice Cream** and *The Science of the Rain Delay*

Not all of Wonderergy's programming is custom-developed. The Philadelphia Phillies regularly ask Wonderergy to appear on the concourse and in the Hall of Fame Club of Citizens Bank Park, offering up-close experiments during Phillies games and special events. Most frequently we invite guests to make their own ice cream using liquid nitrogen but, when the weather turned wet, we were prepared to accommodate rain-delay crowds, both with ice cream and the science of the rain!

*As always, I cannot speak highly enough about you guys. Both from an entertainment standpoint, as well as your willingness to make our events a success. Case in point, your ability to stick out our rain delay past the scheduled time. We always receive rave reviews about your show!*

Jerry O'Connor, The Philadelphia Phillies

### Heritage Builders Group

**Safe Alchemy**

A construction firm which specializes in building Banks asked Wonderergy to help them attract retail bank representatives at the NJ Bankers' Association Convention. One catch: They had discovered Wonderergy only one week before the conference! Could we help? Absolutely. We modified a previously developed chemistry demonstration and it fit the bill (or, in this case, penny).

We learned that their experience with vaults was one of their biggest differentiating factors, so we focused on what makes safes strong: alloys. We invited bankers to turn pennies into silver and gold – an attractive proposition. They were really making alloys and exploring how mixing metals can combine their properties to make them more resistant to heat, drilling, explosions, and more. We imprinted our client's name into every penny, punched it, and turned guests' experiments into key chains and bracelets. It drew quite an interested crowd, including nearby exhibitors, and generated substantial leads for our client.

### Curtis Analytic Partners

**Annual Retreat Keynote**



Wonderergy was invited to add to Curtis Analytic Partners' team-building retreat. CAP does market research and analysis for pharmaceuticals and claims to be able to discern causalities in the marketplace.

For CAP, we built a program around both of these features. First, the misleading nature of large populations and that many different things can look the same from a distance. We "un-fried" an egg, made things disappear, boil, and generally played with looking closer at everyday things. Then we turned the focus to bonding, effort sharing, beds of nails, and more. The group really came together over the rich and creamy ice cream made right in front of their eyes!



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