

# InterroBang

## Much More Than a Game

*From its inception in 2009 through its most recent round of play wrapping up in June 2011, InterroBang—an online game that challenges middle and high school students to complete missions with deeds that connect them to others while solving real-world problems—has gained a loyal following. Tens of thousands of young people across the United States and from 124 nations have worked in their classrooms and their communities to complete an array of challenges that link learning, problem-solving and reflection. Since its launch, InterroBang has enjoyed almost 65,000 visits (with nearly 30,000 unique visitors), has garnered interest and accolades from the White House, and captured a prestigious finalist spot at the 2011 Games for Change Festival. This report summarizes the game’s background, partners, and key accomplishments and shares lessons learned that can help shed light on similar efforts in the future.*



Hannah Chapple had always been a bright student, but her mother noted that she, like many middle and high school students, had trouble “finding her wings” in terms of academic success and engagement. But that started to change for Hannah when her class became involved with InterroBang, an online game that challenges young people to complete missions by getting out into the community and addressing real world problems. As Hannah became more involved in the game, her mother began to notice a change.

“I was a little skeptical last year when she told me she was playing a game for school on the computer called ‘InterroBang’” says Hannah’s mother, Holly. “However the drive or little spark I saw in her could not be denied... I am so thrilled and excited for her and now that spark is a fire. There is something really simple and basic and comforting about this game... [students] are able to reach to new heights and personally challenge themselves.”

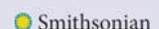
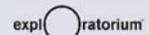
Perhaps Hannah’s most impressive project from the game came on a mission related to the Martin Luther King, Jr. Day of Service. Expanding on the original mission and making it her own, she created a large mural for her school based on the “I Have a Dream” speech, with the personal hopes and dreams of the entire student body represented. The school administration was so impressed with the result that the MLK Mural of Dreams will now be an annual tradition. Additionally, Hannah leveraged the experience to bolster her college applications and win a \$2,500 scholarship.

“This truly was the best thing Hannah could have become involved with,” notes her mother. “I am so thankful, thankful, thankful, that Hannah is playing a game called InterroBang; who would have ever guessed this!”

Hannah’s story is just one of thousands to come out of the development of InterroBang. This innovative and interactive game provides students with an opportunity to engage their communities, schools, families, and peers in creative and challenging ways. Best of all, the game is designed to foster real-world changes—improving

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neighborhoods, supporting the needy, cleaning the environment—using a platform, online gaming, that is most often associated with passive consumerism.

This report focuses on the history and development behind InterroBang, the game’s structure and participants, and the many successes that have resulted from this investment in a new way of connecting gaming to real-world engagement and service-learning.



## Origins of InterroBang

In 2009, **Microsoft US Partners in Learning** and the **Corporation for National and Community Service’s Learn and Serve America** program formed a partnership to collaborate on new ways to reach youth and engage them in service through technology. The impetus behind this partnership came from several recent reports that had caught the attention of both organizations:

- Findings from the Gates Foundation’s *Silent Epidemic* report, which noted that 6,000 students drop out of American schools every day, mainly because they find their classes “not that interesting” and their schools lacking opportunities for real-world learning.
- The Pew Internet and American Life project’s finding that 97% of youth play video games of some kind, and that youth who play interactive games frequently tend to exhibit stronger social relationships, enhanced ethical decisionmaking, and greater civic engagement.

“At Learn and Serve America we were asking ourselves what are schools and community-based organizations going to do to engage young Americans in service via online environments?” says Brad Lewis, Program Officer at the Corporation for National and Community Service. “We wanted to figure out how to connect with young people through a game that would get them doing things out in their communities. Seat to street, as we like to say!”

At the same time Learn and Serve America was searching for a game-based solution, Microsoft US Partners in Learning was also trying to figure out how to better engage youth through technology. They had an active partnership with the **Smithsonian**, co-sponsoring four online conferences designed to get students exploring the wealth of science-related information and exhibits provided by Smithsonian. But project director Allyson Knox was looking for something innovative that would create a more dynamic “two-way” interaction with students. Rather than simply providing online content for students to consume, InterroBang offered a way to get at tangible student interaction and “back-and-forth” exchange.

“We had all these questions,” says Knox. “How do we work with youth to design a community that inspires the love of learning? How do we leverage powerful and proven learning approaches such as service-learning, online gaming, and peer-to-peer learning to help youth gain 21st-century leadership skills? How do we welcome, engage, and support all kinds of teachers and youth workers in this process?”

“I was searching for a platform that could bring the worlds of education, technology, service-learning, and student engagement together,” she says. “Then a colleague told me about these interesting guys at Nuvana...”

**Nuvana** is a nonprofit software developer specializing in creative online games that engage learners in activities to change their communities and lives. Nuvana’s core game engine, PlayGo™, had been used in previous online games, such as Flashback, a history-themed project funded by the Corporation for Public Broadcasting. After a few initial conversations, Knox immediately saw the potential for building a new game on this platform.

“I just knew that we had to do something with this. This was the tool that could take the work we were doing with the Smithsonian and expand it into an online environment that would bring in other elements, such as service, parent engagement, and experiential learning. We were pretty excited, so we just went for it!”



## Game Development

Development of the new game began in early 2010 with funding from Microsoft US Partners in Learning. The four original partners—Microsoft US Partners in Learning, Learn and Serve America, Smithsonian, and Nuvana—began piecing together exactly what InterroBang would look like and the key concepts that would influence development.

*The game is designed to foster real-world changes using a platform—online gaming—that is most often associated with passive consumerism.*

“We had some core values that we wanted to inform the development process,” says Knox. “The game needed to tap into the students’ creativity and energy, but we also wanted to incorporate core pedagogical approaches from the worlds of service and experiential learning.” These values were further expressed in the vision for the game:

- An online community inspiring youth to love learning.
- An online community inspiring youth and adults to help one another and help one another learn.
- An online community inspiring youth to take on challenging missions and demonstrate creative ways to complete them.
- An opportunity to practice problem-solving, service-learning and critical-thinking skills, and creativity.

As with Flashback, the developers decided to focus on a mission-based game structure. Students would select and complete their missions, then upload their final “deed”—often a combination of video, photograph, song, poem, and essay—to the InterroBang site. Users would then earn points, badges, and rewards based on their activities. The missions would provide both opportunity for real-world engagement and creative use of technology within the game.

Within this framework, development of the missions and game structure was predicated on four desired outcomes for youth who participated:

- I pushed myself to do something I’ve never done before.
- I helped someone else complete their deed.
- My deed changed me.
- My deed changed my neighbor, my community or the world.

The development of the game happened on a very quick timeline, with the initial happening in May 2010. The initial response and participation was very encouraging, with more than 8,000 students participating from around the country. A second round of the game—launched in November 2011—brought new partners to the fold: **ePals**, a leading provider of collaborative technology for schools, and the **Exploratorium**, a museum dedicated to encouraging the exploration of science, art, and human perception.

With concerted effort, timely funding, and fresh ideas, these partners had quickly created an innovative game that was grounded in proven approaches to learning while providing students with a unique opportunity to express themselves and become engaged with friends, family, and community.



## The Structure and Pedagogy of InterroBang

At its core, InterroBang is based on service-learning, a pedagogy that propels students into positions of power and control asking them to use their enthusiasm, intelligence and ingenuity to make lasting change through a research-driven model. The core concepts of service-learning include: Investigation, Preparation, Action, Reflection, Demonstration, and Celebration (IPARDC). Service-learning has been shown to positively affect grades, attendance and educational aspiration<sup>1</sup>. Furthermore, student voice has been established as a core tenet of high-quality service-learning and is one of the key reasons that this element has been infused into the InterroBang strategy.

This pedagogical background plays out in the actions players take in the game, beginning with the selection of missions. These missions are created by youth and adults and organized by areas of inquiry such as science, service-learning, creativity, and exploration. In all, there are now more than 100 missions students can choose from on the InterroBang website: <http://playinterrobang.com>.

To make InterroBang as fair as possible, the players are divided into two leagues: middle school and high school. Players only compete against others in the same level.

“Many missions have a transformative focus in which students must make a change in their habits or community,” says Knox. “For example, the Project Clean Stream mission asks players to develop and execute a long-term plan to keep a local stream clean. These types of activities link students outside the classroom but they also allow them to document the real changes they are making in their community.”

The documentation of mission activities is where the “magic” of InterroBang really happens. This documentation is often done through the use of familiar technology and participatory media—students share their efforts with pictures, video, music, and writing within the InterroBang community. Completed and uploaded missions are known as “deeds.”

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<sup>1</sup> Billig, S. H., Root, S., & Jesse, D. (2005). The relationship between quality indicators of service-learning and student outcomes: Testing professional wisdom. In S. Root, J. Callahan, & S. H. Billig (Eds.), *Advances in service-learning research: Vol. 5. Improving service-learning practice: Research on models to enhance impacts* (pp. 97–115). Greenwich, CT: Information Age.

Blyth, D., Saito, R., & Berkas, T. (1997). A quantitative study of the impact of service-learning programs. In A. Waterman (Ed.), *Service-learning: Applications from the research* (pp. 39–55). Mahwah, NJ: Erlbaum.

In perhaps the most unique aspect of the game, skilled moderators review these deeds according to assessment rubrics. They provide students with direct feedback about their submissions and offer tips and guidance on how to further complete or improve their documentation of their deed.

Teachers who were working with InterroBang players (or even organizing groups to play) greatly appreciated the support of the moderators on the site. Several expressed thanks that the moderators made their students think further about their work and did not accept the deeds as complete until they met the required benchmarks. They also appreciated the moderators' help in spotting plagiarized or repurposed content and in reiterating points they were making to students about applying critical thinking and bringing creativity to classwork. Noted one teacher: "I feel supported by, and connected to, other educators because of InterroBang."

The opportunity to interact with moderators was valued by students, as well. Several noted that the feedback they received helped them improve not only their deeds, but their skills in accepting and incorporating feedback.

Once deeds are officially approved, players earn points for completing the mission. They can also be awarded "badges" that signify special achievement (see page 14 for some representative examples). Badges are awarded for being the first to complete a mission, outstanding use of technology, superior community involvement, and a host of other fun and creative accomplishments.

These points and badges are then tallied in pursuit of prizes awarded at the end of the game. There are many ways to earn recognition and win prizes in InterroBang:

- As an individual if you are in middle school or high school
- As a player working within a group
- As a player who is deemed to have completed a mission with the highest quality
- As a player or member of a team that has accumulated the most points during the duration of the entire game

Prizes have included items such as Flip video cameras and Xbox gaming consoles.

### **Top 10 InterroBang Missions (in terms of completion by players)**

1. Create a Videogame Part 1: Make A Character
2. Painting With Light
3. Tiny Pants Photo Challenge
4. Y is for Yoga
5. Judge A Book By Its Cover
6. Shopping Cart Art
7. Trespassing the Future
8. Share the Air
9. Create a Videogame Part 2: Make A Plan
10. Dreams Collage

## InterroBang Participants

From the beginning, InterroBang was designed to be played by a diverse range of students, both in terms of age and their level of technology access. Although some of the missions involve the use of technology to complete the deed, the overall game design is not reliant on high-end tech access. All a player needs is an Internet connection to access the site and upload deeds. This has democratized participation in the game, while also placing the emphasis on the work done away from the computer.

*“I feel supported by, and connected to, other educators because of InterroBang.”*

“This is still about engaging communities,” says Lewis, “But we are using the gaming platform to connect with and motivate the youth. That’s the exciting part, and you can see it when you look at who is participating.”

Over the three rounds of the game, InterroBang has welcomed almost 65,000 visits to the site and more than 800,000 page views. All 50 states were represented by players and teams, as were 124 countries outside the United States.

An analysis of the 10 highest-scoring teams at both the middle and high school level captured the percentage of time that participants who played as teams collaborated with others as well as level of teacher engagement. As levels of collaboration and teacher involvement increased, the quality of completed deeds climbed as well, pointing to the potential of InterroBang to truly enhance the learning process and foster real community.

The site has had almost 30,000 unique visitors since launch. Each visitor spends an average of 10 minutes on the site, primarily searching for and uploading missions. Visitors also spend time looking at the completed deeds of other players, providing comments and networking with each other on the site. These data suggest that InterroBang produced a high level of engagement among participants and that the diverse nature of the missions was a good fit with a highly diverse set of players. One high school teacher in Loudon, Virginia noted that playing the game went a long way toward minimizing “senior slump” in her 12th-grade class: *“I cannot tell you how much my seniors are enjoying and engaging in this competition...Thank you so much. Typically after their AP tests are done [mid-May], it is a real struggle to keep them engaged...well, no more (that is if you will continue to offer such awesome opportunities). Please tell me you’ll do this again?!”*

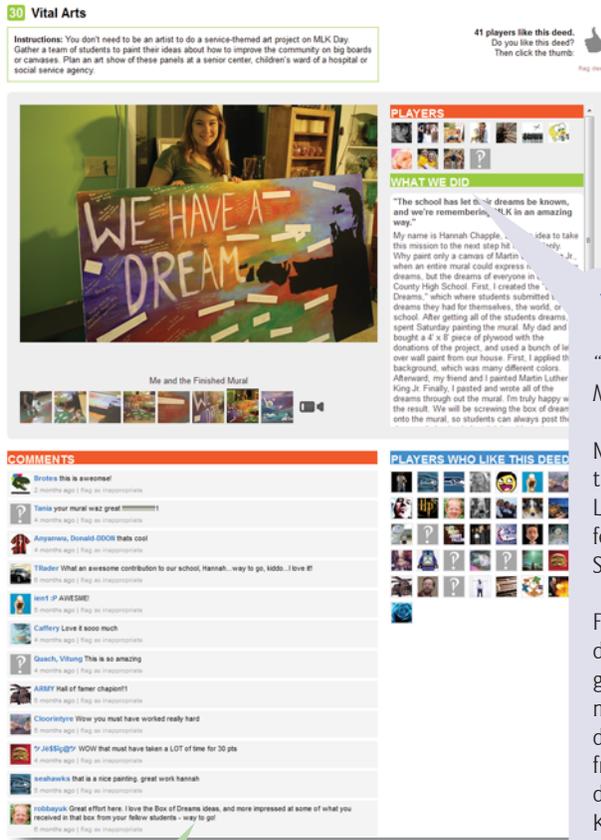


## The Success of InterroBang

To get a true sense of the scope and quality of effort of InterroBang participants, all one has to do is look at some of the hundreds of completed deeds on the site. Each mission lists the players who have completed it and provides a link to their deeds, fully capturing all the great work done on a mission-by-mission basis. We have selected several representative missions to highlight the diversity and quality of student work.

## Mission: Vital Arts

**Summary:** This mission revolved around a service-themed art project for MLK Day. As noted in the introduction to this report, Hannah created an MLK Day of Service “I have a dream” mural, depicting student dreams. This will now be an annual project at Hannah’s school, leaving a lasting change as a result of her service.



### What we did:

*"The school has let their dreams be known, and we're remembering MLK in an amazing way."*

My name is Hannah Chapple, and the idea to take this mission to the next step hit me suddenly. Why paint only a canvas of Martin Luther King Jr., when an entire mural could express not only a few dreams, but the dreams of everyone in Loudoun County High School.

First, I created the “Box of Dreams,” where students submitted the dreams they had for themselves, the world, or the school. After getting all of the students dreams, I spent Saturday painting the mural. My dad and I bought a 4' x 8' piece of plywood with the donations of the project, and used a bunch of left over wall paint from our house. First, I applied the background, which was many different colors. Afterward, my friend and I painted Martin Luther King Jr. Finally, I pasted and wrote all of the dreams throughout the mural.

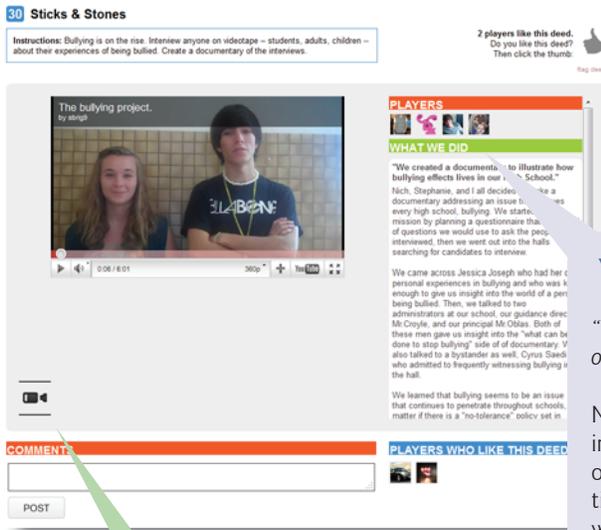
I'm truly happy with the result. We will be screwing the box of dreams onto the mural, so students can always post their dreams. I absolutely loved doing this project, and would be thrilled to have students at LCHS continue projects like these.

Players tagged in this project are those who have donated money to help purchase supplies, so thank you! And thank you to the InterroBang executives as well!

**“Great effort here. I love the Box of Dreams ideas, and am more impressed at some of what you received in that box from your fellow students... way to go!”**

## Mission: Sticks and Stones

**Summary:** This mission required players to explore bullying by interviewing people about their bullying experiences. In the example deed below, four players produced a video featuring a victim of bullying, two administrators from the school, and another student who was a frequent witness to bullying. Together, the interviews provide awareness and context on the issue while highlighting approaches to reduce bullying in the school.



Videos for most deeds were shared using YouTube, Vimeo, and other streaming services.

### What we did:

*"We created a documentary to illustrate how bullying effects lives in our High School."*

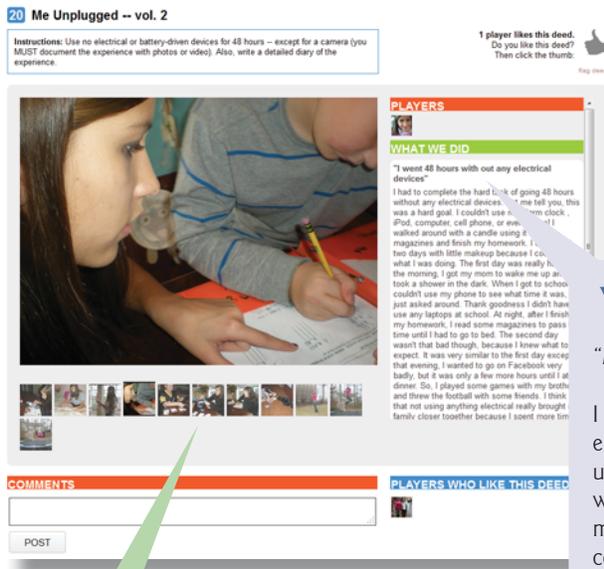
Nich, Stephanie, and I all decided to make a documentary addressing an issue that plagues every high school, bullying. We started our mission by planning a questionnaire that consisted of questions we would use to ask the people we interviewed, then we went out into the halls searching for candidates to interview.

We came across Jessica Joseph who had her own personal experiences in bullying and who was kind enough to give us insight into the world of a person being bullied. Then, we talked to two administrators at our school, our guidance director, Mr. C, and our principal Mr. O. Both of these men gave us insight into the "what can be done to stop bullying" side of documentary. We also talked to a bystander as well, Cyrus who admitted to frequently witnessing bullying in the hall.

We learned that bullying seems to be an issue that continues to penetrate throughout schools, no matter if there is a "no-tolerance" policy set in place. But we also learned that with proactive administration, confident bystanders, and strong victims, schools can come together to slowly decrease the bullying activity in both schools and on the Internet.

## Mission: Me Unplugged

**Summary:** This mission challenged players in an interesting way: They had to go 24 or 48 hours (the latter for more points) without using a single electronic device or appliance – no electricity at all (except for a camera to document the challenge). This mission was designed to spur critical thinking about the often unanalyzed role of technology in our lives. Most players opted for, and struggled with, the 24-hour version. But the deed for the 48-hour challenge below from Nicole W shows that players came up with creative and meaningful ways to pass their time. She writes: “Let me tell you, this was a hard goal. I couldn’t use my alarm clock, iPod, computer, cell phone, or even lamps! ... I think that not using anything electrical really brought our family closer together because I spent more time with them. It also encouraged me to spend more time exercising.”



**Nicole noted she spent more time than usual with her younger brother while “unplugged.”**

### What we did:

*“I went 48 hours with out any electrical devices.”*

I had to complete the hard task of going 48 hours without any electrical devices. Let me tell you, this was a hard goal. I couldn’t use my alarm clock , iPod, computer, cell phone, or even lamps! I walked around with a candle using it to read magazines and finish my homework. I even went two days with little makeup because I couldn’t see what I was doing.

The first day was really hard. In the morning, I got my mom to wake me up and took a shower in the dark. When I got to school I couldn’t use my phone to see what time it was, I just asked around. Thank goodness I didn’t have to use any laptops at school. At night, after I finished my homework, I read some magazines to pass the time until I had to go to bed. The second day wasn’t that bad though, because I knew what to expect. It was very similar to the first day except that evening, I wanted to go on Facebook very badly, but it was only a few more hours until I ate dinner. So, I played some games with my brother and threw the football with some friends.

I think that not using anything electrical really brought our family closer together because I spent more time with them. It also encouraged me to spend more time exercising.

## Mission: Foodshed

**Summary:** The Foodshed mission asked players to compare and contrast the produce found at a national grocery chain with that found at a local farmers' market. The mission specifically asked players to note the source of the food, with the intention of raising awareness about the amount of resources that support food production and the possibility of food scarcity. In the example deed below, players "sylvialaughsalot" and "Dark CocoLatte" note not only the differences in produce quality, but also in the physical and interpersonal environment: "At [national chain] most workers would not communicate with the customers. However, the vendors at the farmers' market will greet, smile and spark conversations. They were eager to help us out with this mission; for that we would like to give special thanks to them." They also compiled a list of all of the items one could purchase for the same price or lower at the farmers' market.

**30 Foodshed**

**Instructions:** Mission: Visit the produce section of a supermarket. Take notes on at least 10 varieties of produce available. Note also the origin of the produce (all produce not grown in the US must indicate its origin). Now, examine locally-grown produce found at your local Farmer's Market. Make a documentary or detailed report comparing and contrasting supermarket produce with Farmer's Market produce.

**12 players like this deed.**  
Do you like this deed?  
Then click the thumb.  
Flag deed

**PLAYERS WHO LIKED THIS DEED**

**WHAT WE DID**

"We took a visit to [national chain] local Safeway and the Alemany Farmers Market in San Francisco."

The Alemany Farmers' Market was an interesting experience! In our opinion, we thought it was way better than our local grocery store, [national chain]. It was a different but a very friendly environment. At [national chain], most workers would not communicate with the customers. However, the vendors at the farmers' market will greet, smile and spark conversations. They were eager to help us out with this mission, for that we would like to give special thanks to them.

We noticed that the produce from the farmers' market was more eco-friendly. There were barely any plastic packaging and coverings. Most of the products were also organic, whereas the products from [national chain] were not. At the farmers' market, we asked the vendors about the origin of the products and most of them originated from California. We noticed that most of the farmers' market products also came from Watsonville, CA. Products from [national chain] were from all over USA. [National chain] products usually come from big companies that have numerous farms located around the country. We believe that the produce from the farmers' market was handled with more care than the produce from [national chain]

**COMMENTS**

Joe Kwong Excellent comparison photos. Thanks. You get points and badges!  
about 1 year ago | Flag as inappropriate

sylvialaughsalot Thanks!  
about 1 year ago | Flag as inappropriate

Dark CocoLatte Good work, I would be if you compared it directly.  
about 1 year ago | Flag as inappropriate

sylvialaughsalot Haha, Thanks Man! D  
about 1 year ago | Flag as inappropriate

Dark CocoLatte Great photos! :D & definitely, Farmers Market > Safeway  
about 1 year ago | Flag as inappropriate

Dark CocoLatte PaperBellyHill sylvialaughsalot I can see you put tremendous effort into this mission!  
about 1 year ago | Flag as inappropriate

Fishy WOW good job!  
about 1 year ago | Flag as inappropriate

Dark CocoLatte You did a really good job. I agree safeway workers don't always communicate with the customers.  
about 1 year ago | Flag as inappropriate

### What we did:

"We took a visit to our local [national grocery chain] and the Alemany Farmers Market in San Francisco."

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At [national chain], the produce could not be compared with the quality of the produce at the farmers' market. For example, the organic carrots from Tomatero Farms are nicely washed and free from dirt. However, the carrots displayed inside [national chain] seemed dry and crusty. The roots and the shoots of the carrots also seemed like they were cut with haste and without care. Most of the fruits were harvested the day before the vendors sell their fruits. In [national chain], most fruits were harvested a week before they are actually displayed for sale.

To us, the prices of products are more worth it if bought from the Farmers' Market. The reasons for our opinion are because the organic products in grocery stores like [national chain] are usually more expensive than non-organic products. However, at the farmers' market you can get organic products for less than the price offered at places like [national chain].

**"Excellent comparison photos. Thanks. You get points and badges!"**

## Mission: Project Cleanstream

**Summary:** This simple yet impactful mission asked students to clean up a stream in their area and document the before and after results. Most players chose streams close to their school or home, usually because they were already aware of the trash and pollution problem at the site. In the example deed below, five players from a team in Maryland cleaned up a creek that was used as a shortcut for students leaving behind lots of trash. In addition to the clean up, the players also planned for future efforts: “Cleaning the stream was a great experience and we hope can influence others to do the same. We plan to return at least twice a month to clean it again if there is more litter. We also plan to post some signs persuading people to not litter.”

**30 Project Clean Stream**

**Instructions:** Find a polluted stream or river and create a plan to clean it up and make it healthy, happy and better for all who depend on it. Go out and try your plan and document the results with before and after pictures. Submit your plan.

**3 players like this deed.**  
Do you like this deed?  
Then click the thumb!

**PLAYERS**

**WHAT WE DID**

**"Cleaning a stream"**

After noticing the large amount of debris in our community, we were enlightened to try to make a difference for everyone. To clean the stream we plan to remove the trash and put it in a bag and throw it in a dumpster.

We cleaned a stream close to our school. We first found it when we needed a shortcut to a store. We disposed of the trash properly through the use of recycling bins and trash cans. After some time of hard labor, we managed to completely clean the area. The stream afterwards looked much healthier and flowed nicely. Cleaning the stream was a great experience and we hope can influence others to do the same. We plan to return at least twice a month to clean it again if there is more litter. We also plan to post some signs persuading people to not litter.

**Update:** After a few months of continuing to return to the stream and cleaning, the environment seems to be much healthier and greener. We also managed to get many people, including friends and family, to actively participate in our cause.

**COMMENTS**

**Brad Lewis** Excellent deed with a good follow up plan. Consider taking this one step further and document how long it takes you to clean each month for six months and see if the signs are having the intended effect as measured by decreasing time to clean the same area, each month. Then present your findings to the local Environmental Protection Agency (city or state, perhaps to start!) Rock on!

4 months ago | Flag as inappropriate

**PLAYERS WHO LIKE THIS DEED**

**“Excellent deed with a good follow up plan. Consider taking this one step further and document how long it takes you to clean each month for six months and see if the signs are having the intended effect as measured by decreasing time to clean the same area, each month. Then present your findings to the local Environmental Protection Agency (city or state, perhaps to start!) Rock on!”**

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*“Cleaning a stream”*

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## Accolades and Awards

InterroBang has earned plenty of praise during the first two rounds of the game, not only from players, teachers, and parents, but from the broader gaming world and policymakers as well. Among the highlights:

- InterroBang was second-place winner of the Games for Change Social Impact Game of the Year in 2010. Winners in this category were selected by popular vote.
- At the 2011 Games for Change Festival, InterroBang was one of four finalists (out of more than 40 entries) in the Education and Learning category. Finalists in this category were selected by a panel of seven esteemed jurists from the fields of education and technology.
- The developers of InterroBang were also featured in a meeting on innovations in service-learning at the White House, which included educational technology experts from the US Department of Education, White House Office of Science and Technology Partnerships, the First Lady's Office and the Domestic Policy Council.

In addition to these compelling deeds, the feedback and involvement from teachers, parents, and mentors throughout the game also provided evidence of success:

- Several teachers made InterroBang points a requirement for completing their class.
- Teachers and parents themselves authored many missions which directly correlated to the curriculum for the second round of the game.
- At least one school district changed its policy around accessing YouTube from school computers when administrators saw the creative expression being developed by players.

The involvement of teachers, parents, and mentors was further facilitated by dedicated guidebooks available on the site explaining how they could best support the students who were actively playing. The Microsoft US Partners in Learning team frequently received letters and emails from adults supporting the players, thanking them for providing this opportunity to learn and grow with their child or students in the classroom. One parent noted, "I had no idea my child was so creative!"



## Impact on InterroBang Partners and Future Game Development

The success of InterroBang can also be felt in the lasting impact it's had on the many partners involved in the project. From the Microsoft US Partners in Learning perspective, the success of the game has led to a rethinking of future efforts. "I think we will be incorporating much more gaming into future projects," notes Knox. "Seeing how effective this has been has opened our eyes to the possibilities gaming provides. It's still grounded in service and pedagogy, but I loved how this game got students thinking about their thinking. It's been great to use this online experience to boost real-world experiential learning."

Brad Lewis also indicates that the success of InterroBang has validated much of CNCS's thinking around the potential for gaming. "I think we know now that gaming can be this huge force in mobilizing young people to engage their community. The challenge now is to take this to the next level."

Lewis thinks that more can be done to improve the InterroBang experience for players and the impact the game has.

“I’d like to see us find ways of integrating Facebook and other social media into the game. We’ve also talked about doing some kind of micro-economy using the points that players build up while playing. And certainly, we need a mobile version for phones, tablets, and other smart devices. People’s online lives are increasingly connected to their ‘real’ life—and we need to be able to engage players in different ways. There is so much potential here.”

Lewis also noted the need to expand the game’s reach, especially through “cross-pollination” with other federal partners and websites, such as Afterschool.gov.



## Lessons Learned

While no formal evaluation of InterroBang was conducted, the key partners were able to glean important lessons across the three iterations of the game. Although some of these findings are anecdotal, they can provide valuable guidance to others considering a similar blend of online gaming, community exploration and service, and student engagement. Lessons include the following:

- The costs of running a game like InterroBang are significant and may be prohibitive of long-term scalability.
- Hands-on moderation was crucial to student engagement. Moderators based at a number of partner sites provided thoughtful, constructive feedback on student deeds, usually with a very fast turnaround. As the Lead Moderator, Adrian Dede, shared: “Players really appreciate personalized one-to-one feedback from a real mentor within 24 hours of their submission. Moderators help players improve their work and think about what they learned.” Funding an adequate number of moderators, however, and providing the quick response time, is also one of the cost and staffing challenges of an endeavor such as InterroBang.
- Students were less motivated by prizes than the partners originally expected. Moderators observed that students were driven more by intrinsic rather than extrinsic motivations in their efforts to complete and revise their deeds.
- Partnerships were key. With a combination of government, private industry and national nonprofits, the partnerships behind InterroBang brought together a diverse set of players. While this collaborative background was an important part of the game’s success, balancing the competing needs of a range of partners (both monetary and non-monetary partners) was a challenge. Clear expectations, roles and responsibilities for all partners would be crucial in any further iterations of the game.
- Due to security concerns on the part of schools and districts, future games like InterroBang would benefit from using data encryption (such as HTTPS). In the experience of Microsoft US Partners in

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Learning, school districts are more confident about letting students access such sites, eliminating potential barriers to participation.

- Leveraging existing national events proved to be a productive way to gain traction for InterroBang (and presumably for similar efforts). Events capitalized on during InterroBang’s run included Global Youth Service Day, the National Service-Learning Conference, the National Conference on Volunteering, Martin Luther King, Jr. Day of Service, and even the annual Thanksgiving National Football League game in Detroit, Michigan.



## Conclusion

Over the two years of development and participation, InterroBang has touched the lives of thousands of young people and their communities. The project has successfully merged the best participatory aspects of online gaming with real-world service-learning, providing a new platform for students to express their creativity, aspirations, and solutions to their community’s problems. Each of the program partners—Microsoft US Partners in Learning, Learn and Serve America, Nuvana, Smithsonian, ePals, and the Exploratorium—can take pride in developing something innovative and engaging. Future efforts to incorporate service-learning into online games will benefit considerably from the success and lessons learned from the InterroBang project.

### Sample Badges Earned by InterroBang Players



*For excellence in Deed descriptions!*



*Be the first to complete a mission.*



*Has done 10 missions.*



*You've solved a problem using an unconventional methodology.*



*You did something transformative, changing a person, a place or a thing for the better.*