

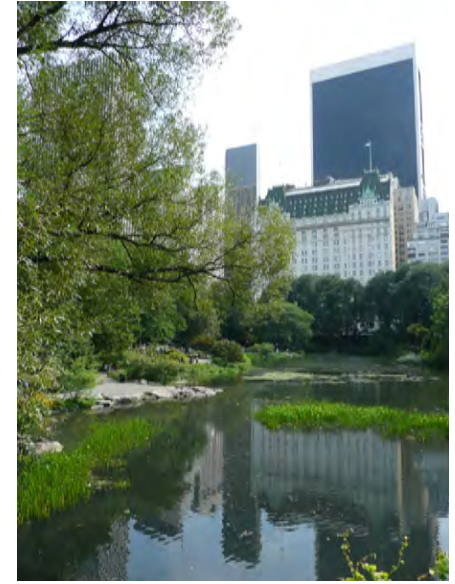


DesignMatters Fellowship

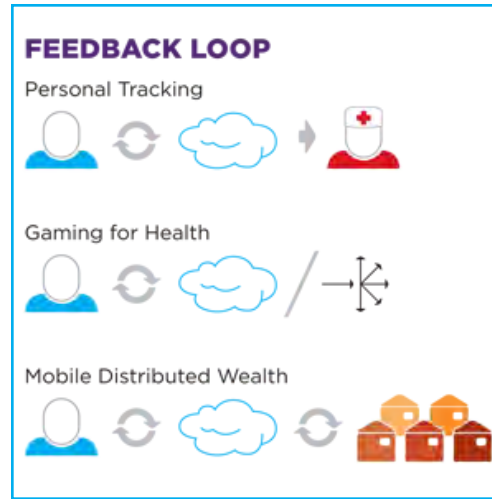
UNICEF 2010

I was fortunate to have received the DesignMatters Fellowship Award as a graduate candidate for Art Center's Media Design Program. My summer was spent as a design fellow with UNICEF's Innovation Team, and I was nothing but thrilled at the opportunity. A video that documents my experience can be found [here](#).

The location of the fellowship, being in New York City, was an aspect that only stood to amplify my summer. This was a summer of seeing old friends, and of welcoming new friends. New York is the perfect place for new experiences, for seeing things anew. It truly is a unique place.



The City of
WHAT YOU WANT
IT TO BE



stories of UNICEF Innovation

CATEGORIES

- Featured
- ITP
- Design for UNICEF
- USRA Capstone
- Academia
- Prototype
- Sustainability
- RapidSMS
- Ignited
- WebDev
- ITP
- Design for UNICEF

'Design for UNICEF' harnesses innovative third graduate students at New York University

NEW YORK, USA, 4 December 2009 – 'Design for UNICEF' is an interactive programme where graduate students examine some of the challenges work in groups to research and prototype solutions. The graduate class Clay Shirkly and is a collaboration between UNICEF and the Interactive

A Class as a Conversation

Chris Fabian, a co-leader of UNICEF's Innovation Unit, went over the ITP's Design for UNICEF class, helping to form an architecture on which individual accounts of the class experience. Chris discussed with me t

VULNERABLE

EX ANTE ...

- ... the **capacity** of a system to be wounded from a stress or perturbation ...
- ... **likelihood** that some socially defined groups/society will suffer disproportionate death, injury, loss or disruption of livelihood ...
- ... a **direct measure** of the **susceptibility** to suffer loss or damage ...
- ... further **exacerbation** or process which generates the **likelihood** and scale of damage from the impact of a given hazard ...
- ... the **potential** for casualty, destruction, damage, disruption or other form of loss, with respect to a particular element ...
- ... the **potential** loss in value of an element at risk from the occurrence and consequences of natural and technological hazards ...

EX POST ...

- ... the **degree of loss** in a given element at risk ...
- ... expresses the severity of loss in terms of its consequences ...
- ... rose with, lead and recover from the impact of a natural or man-made hazard ...
- ... **degree** to which the community absorbs the effects of extreme physical events ...
- ... increases with the number of people affected by the impact of a natural hazard ...
- ... coping **capabilities** that determine the extent to which a society can absorb damage from extreme events ...
- ... is a human-induced **disturbance** that results from public policy and resource availability/distribution ...

I refer to it as **FASTER PAPER** because RapidFTR is not a new or different ...

MY INTEREST in Family Tracing and Reunification **SURFACED DURING THE FIRST WEEK** of class. Still, development of what would become RapidFTR didn't begin until halfway through the term.

It was an **ITERATIVE DESIGN PROCESS**. Eventually, our group came up with a series of mockups for use on an Android phone, which **WE PRESENTED AT SEMESTER'S END AT UNICEF HEADQUARTERS**.

In the weeks following the devastating earthquake in Haiti in January of 2010, there were many reported instances of child trafficking. Chris Fabian, co-leader of the UNICEF Innovations Lab and one of Clay's partners in the Design for UNICEF class, asked us to **PUT RAPIDFTR INTO PRODUCTION** as quickly as possible. **MY GROUP AND I ACCEPTED THE CHALLENGE** and I took it on as my thesis.

The first step was to create a detailed design document to explain the thinking behind our mockups, and then

We studied appropriate established meeting rooms with Thomas what to do **SOURCE PRO**

In March a conference. After their code guide that it

NEXT STEP partner or working

UNICEF & Academic Experiences in Collaboration

At UNICEF I worked on several different projects, in capacities both small and large, and as the summer progressed it seemed apparent to me the goal was not to make something flashy but to use my background to help make some of UNICEF's goals more streamlined, and more understandable.



Child Friendly Technology

A framework on how to implement technology in a child-friendly way, that takes into account educational priorities and focusses on the child, for the purpose of achieving the greatest possible benefit and making positive strides in learning. The goal of the Child-Friendly Technology (CFT) project is to one day put this tool in the hands of UNICEF Country Offices for ease of planning and implementation of educational technology.

A TOOL FOR DISCOURSE.



Local Environment

This section addresses characteristics of the local population and environment, serving as a tool for discussion as well as a resource for further investigation into educational technology.

RESOURCES FOR EDUCATION.



Content Development

This section details sound practices in diagnosing educational needs and using proven methods to form appropriate educational material to address them.



Teaching with Technology

Examples of successes and failures when implementing different types of methods and tools into education, and background given to the factors and planning that led to different outcomes.



Devices & Mediums

Outlining the appropriate uses and drawbacks of each type of hardware, and a listing of technical specifications.

WAYS TO LEVERAGE THE EXPERTISE OF MANY.



Partners

Describing the roles and recommended modes of interactions with various partners that can help aid educational initiatives, from the global to the local level.



Processes & Strategies

This section examines the overall strategies and processes that lead to a project achieving its goals. Examples include strategies to elevate equity, to ensure proper oversight, to engage your community, and many others.



One example of this is a project I worked on called Child Friendly Technology. Child Friendly Technology is a framework that lays out the considerations and processes involved when implementing an educational technology program. UNICEF country offices the world over are increasingly turning to technology as a solution to achievement gaps in their region's educational system.

This guide was created in order to assist in the planning of such deployments to maximize the potential benefit. Child Friendly Technology is separated into three areas. The first is intended to be a tool to facilitate discourse, the next layer is a detailing of educational resources, and lastly elaborated are the ways to leverage the expertise of others.

THIS IS A TOOL FOR DISCOURSE. Your **Local Environment** determines appropriate responses to educational needs. Marking this page and comparing it with others is intended to act as an identifier of potential barriers specific to a given situation, and reveal effective ways to overcome them.



1 Weather Extremes

Each technological device has its limitations in terms of how far it can withstand natural elements.

- temperature levels hardware will be able to withstand
- limits of humidity for hardware functioning



Temperature High/Lows



Humidity Levels



Dust Levels

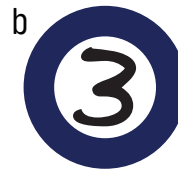
2 Infrastructure

Local community infrastructure determines which technologies are appropriate.

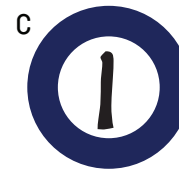
- percentage of children with mobile coverage
- percentage of villages/towns with road access



Road Access



Mobile Access



Internet Access



Electricity

DECISION MAKING THROUGH DIALOGUE

Child Friendly Technology is headed with a section called Local Environment. There is no perfect formula for every educational technology deployment. For this reason, Local Environment is essentially a tool for productive dialogue. Participants can rate our list of situations from one to five by the degree of concern it can pose. This is to help individuals sit down together and identify their own barriers in education and in introducing technology.

CHILD FRIENDLY TECHNOLOGY

10 Electrical Power

a Solar Energy

In order to implement technological educational devices and ensure their sustainability, power and related technical requirements must first be considered.

Devices & Mediums

Outlining the appropriate uses and drawbacks of each type of hardware, and a listing of technical specifications.

	1st year cost	Yearly cost thereafter	1st month cost	Monthly cost thereafter
Cell Phones (5W):				
Individual chargers	\$10-20	-\$5 (likely less)	\$5-15	\$0.42
Large solar panel + charge controller	\$20-25	(none)	\$20-25	(none)
Small solar panel + car battery	-\$15 (likely more)	-\$2	\$13	\$0.17
Cheap Chinese sub-kilo-watt diesel generator	\$30	-\$15	\$16.25	\$1.25
One Laptop Per Child (OLPC): 6 Watt				
Individual chargers	\$10-20	-\$5 (likely less)	\$5-15	\$0.42
Large solar panel + charge controller	\$25-30	(none)	\$25-30	(none)
Small solar panel + car battery	-\$18 (likely more)	-\$2.5	\$16	\$0.21
Cheap Chinese sub-kilo-watt diesel generator	\$30	-\$18	\$20	\$1.5
Classmate PC and other low-power laptops like netbooks: 12 Watt				
Individual chargers	\$20-35	-\$10 (likely less)	\$10-25	\$0.83
Large solar panel + charge controller	\$50-60	(none)	\$50-60	(none)
Small solar panel + car battery	-\$35 (likely more)	-\$5	\$30	\$0.42
Cheap Chinese sub-kilo-watt diesel generator	\$40	-\$25	\$30	\$2

ITEMS TO CONSIDER

1. Whether the systems will be connected to the grid or be stand-alone.
2. Scale of power generated - i.e. single-appliance, household, school, or village.
3. What kind of solar technology is used, i.e. polycrystalline Si, thin-film Si, organic polymer.
4. How much space the solar panels need.
5. How much power output decreases with dimmer light (such as on overcast days).
6. How much power output decreases when part of the solar panel is covered or shaded.



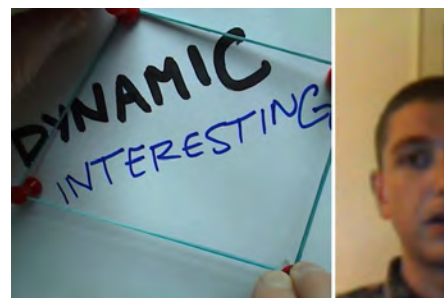
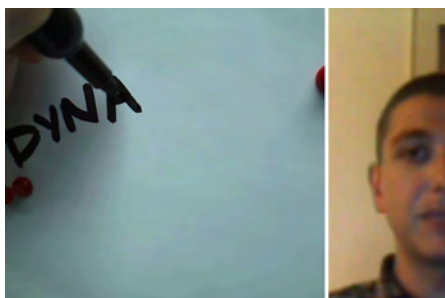
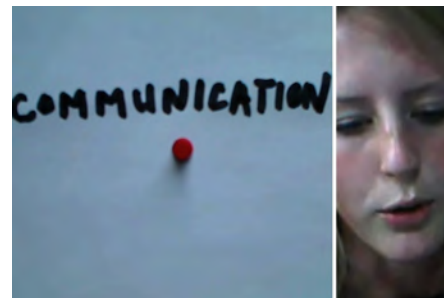
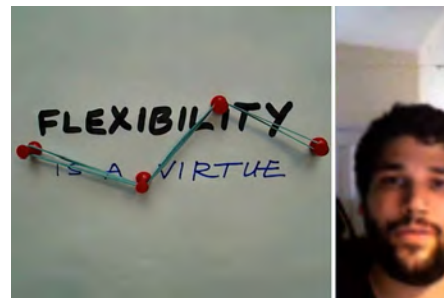
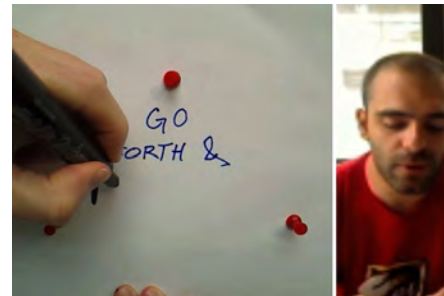
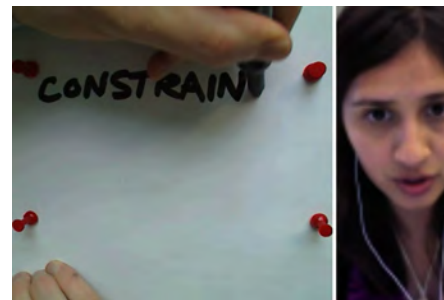
Devices &
Mediums

DM_10 a

9

In addition to exposing educational barriers, this guide also provides examples and resources detailing how they can be overcome. Each of the key points represented by a circle will have a corresponding worksheet, providing concrete information to assist an educational technology deployment.

Child Friendly Technology is still growing and evolving as a resource, however I believe that we have crafted this project into a useful mold that will continue to develop.



The second project I'm profiling is the UNICEF Academia Project. I was tasked with talking to participants involved in some of the many academic collaborations UNICEF has engaged in, from classes designing prototypes, to research projects in the field. This project was intended to reveal some practices that had been fruitful and some that were not, in order to provide guidance for collaborations in the future.

Panthea Lee— “New Methods for Data Collection, Analysis and Use” Content Manager

leave a comment »

UNICEF Innovation Content Manager Panthea Lee was very helpful in explaining the Unit’s partnership with Columbia University’s School of International and Public Affairs (SIPA). Inspired by the UN Global Impact and Vulnerability Alert System (GIVAS) initiative that is currently in development, “New Methods for Data Collection, Analysis, and Use” was SIPA’s third collaboration with UNICEF Innovation. The course was developed with and taught by Professor Elisabeth Lindenmayer, former Deputy Chef de Cabinet under Kofi Annan and the director of the UN Studies Program at SIPA.

As the UN develops a real-time vulnerability monitoring system, it also needs a policy framework for bringing the system to global scale. Although GIVAS will be responsive to widely varied regional parameters, indicators, and priorities, in order to focus this discussion, SIPA was tasked with analyzing two current real-time data collection projects the Innovation Unit was working on, one in Iraq and one in Uganda. The goal was to have the students analyze the projects – their processes and their progress – then abstract lessons for extending similar systems to other UN member states.

While UNICEF and contracted partners were wrestling with the technology behind for real-time data systems, SIPA supported project development with political and operational analysis. Also helpful for UNICEF, Panthea felt, was the safe space academia provides to ask questions and penetrate issues at depths seldom possible in the professional setting.

NYU’s Interactive Telecommunications Program and their partnership with UNICEF

leave a comment »



Since 2008, the [Interactive Telecommunications Program at NYU's Tisch School of the Arts](#) has run a graduate class entitled [Design for UNICEF](#); the course will begin its third session this upcoming fall. In this course, students examine some of the design challenges UNICEF faces, and work in groups to research and prototype possible extensions to existing efforts.

Teaching the course was Clay Shirky, with the steady collaboration of Christopher Fabian and Erica Kochi, co-leads of the UNICEF Innovation Unit. Other UNICEF staff and partners would also attend classes as guest advisors. John Dimatos, a student in the inaugural class who then

became its resident research, will be taking over the role of instructor for the upcoming fall session. The close partnership with UNICEF will remain unchanged.

As John is involved with every stage of the process and all the actors, it was logical to get his feedback on the class first. [In revealing how the ITP collaboration operated, the Innovation Unit hopes other divisions and field](#)

Jorge Just — “Design for UNICEF” student

leave a comment »

Jorge Just was generous enough to share his experiences gained from the “Design for UNICEF” class. He was a participant from the second ITP class, and it happened to turn out that Jorge took the group project and continued it for his thesis. UNICEF has now contracted with him to continue with his prototype, named [RapidFTR](#), with the intention of turning it into a useful tool in the instance of family reunification.

The reason Jorge says he enrolled in the “Design for UNICEF” class was because of the edification that comes from working with an actual client, and being able to work hands-on in the field. Jorge’s job experience prior to coming to ITP, as a contributor for public radio and having organized fan outreach and marketing for musicians fed into some aspects of his school projects. In regards to the UNICEF project, once the project had progressed into a thesis project, it necessitated that Jorge be able to collaborate and draw in people’s talents and abilities toward the goal of developing a working product by open-sourcing the content. This was something that Jorge was able to accept and coordinate more successfully given his background.

When asked about the greatest sources of tribulation and frustration in the class, Jorge pointed to the beginning of the class, when students were given weekly project parameters and shuffled into different groups every couple of weeks. He expressed the necessary difficulty in working with people he didn’t know all that well and whose individual backgrounds and opinions had to undergo a process of discovery in order to form effective design proposals. In the beginning, he also found a source of anxiety to be his relative ignorance regarding the region he was designing for, in this case Sub-Saharan Africa. Lack of knowledge about the

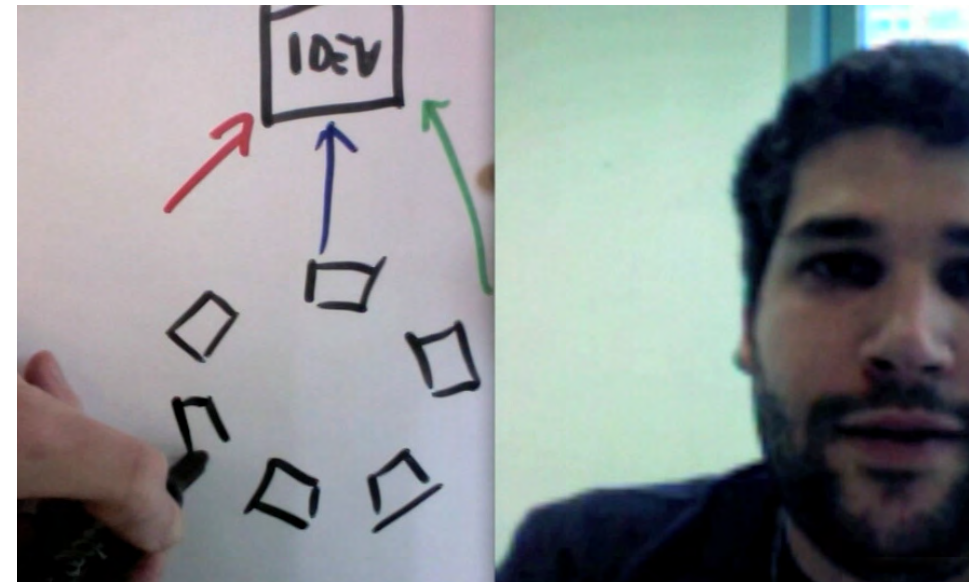
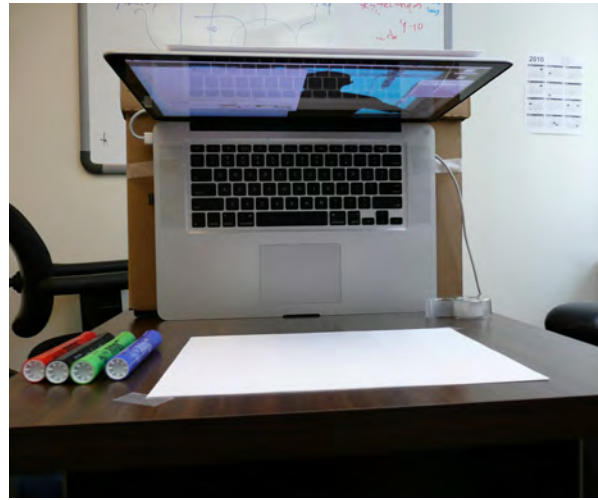
Mark Weingarten— “New Methods for Data Collection, Analysis and Use” Student

leave a comment »

Mark Weingarten, an international policy student participating in the third SIPA and UNICEF class collaboration, offered to lend his opinions on his overall experience. The reason Mark enrolled for the UNICEF class was because he wanted the hands-on experience that came with what Columbia calls a capstone project, which is a client-sponsored class intended to help students address an actual concern under real circumstances. UNICEF is different in that it is more of an academic study than most of the other capstone’s, and having already known of the experience and involvement that an earlier SIPA student Sean Blaschke (now working for UNICEF Innovations) had undergone, it solidified his interest in the class.

The terms of reference changed as the beginning of the class developed, in that the specific deliverables turned out to change as was dictated to be most beneficial both for students and UNICEF. The beginning of the class was the greatest source of struggle for students, according to Mark. While still keeping a positive frame of mind and eager to progress, the frustration was that there didn’t exist a cohesive body of background research for the students to delve into. UNICEF was diligent in answering questions, and in giving insight into what to expect, and students were put in touch with UNICEF’s Uganda and Iraq country representatives. However it wasn’t until students sat down, decided on specific areas to research, and wrote down a list of interview questions that the groups was able to undergo a “turning point... whether or not we actually got to ask every question they at least helped us to crystallize all of our goals and our thoughts.”

I started out by interviewing students and collaborators, and then placed the transcripts on the newly created [UNICEF Stories blog](#). I decided to publish unfiltered accounts for those that might want to delve into the material, and used what I learned as basis for a video communication piece.



I strove to create a video that was effective in communicating distinct messages, but I wanted it to be loose and uniquely interpretive. I improvised some methods to create a downward-looking webcam, so that I could react in some way to the interviews as they were being told.

My original idea was to quickly sketch something that correlated to the message being narrated. I soon realized the doodling wasn't adding any value, nor did it tie together the different interviewees into one coherent thread. However, I was able to iterate and build on this untenable idea into something that worked better, which resulted in this [finished video](#).

DOING IS BELIEVING

I believe what I gained the most out of my fellowship experience was faith in the ability of design to provide a different perspective, and faith that my discipline can partner to augment others.

THANK YOU

DesignMatters

I would like to thank DesignMatters representatives **Mariana Amatullo** and **Elisa Ruffino**, and my DesignMatters mentor **Stephanie Sigg** for their support and for making this all possible.

UNICEF

Much gratitude also goes to the UNICEF Innovation Team, particularly team leaders **Christopher Fabian** and **Erica Kochi** for promoting such ambitious project goals. Thanks also goes to **Jorge Just** and **Khairani Barokka**, in addition to the many other individuals at UNICEF, for their collaborations.

IT WAS A GOOD SUMMER.

Dustin York

Graduate Media Design Candidate
Art Center College of Design