



Simulated Development Project

Fall 2007

Carnegie Mellon



Introduction

- ***Purpose:*** To give you some experience in engaging in participatory research and development
- ***You will be given:***
 - The broad outline of a problem
 - A development partner
 - A faculty advisor
 - A team of classmates to work with
- ***It is up to you to:***
 - Find out what the full context and needs are
 - Negotiate a proposal with the development partner
 - React flexibly to unforeseen events
 - Build capacity with the partnering organization and community
 - Evaluate outcomes and plan for sustainability
 - Provide interim and final reports

Your development partner

- Your partner has an idea of what the organization wants, and what the needs of the community are. This idea may be well founded or not.
- Your task is to:
 - Understand their perspective
 - Consider all viable solutions
 - Then either validate their original idea of a solution, and make it real *or* persuasively recommend an alternative solution

Simulation details

- We are basing the simulated participatory research and development on actual experience.
- You don't know what the *project* is on day one.
- Information will be incomplete.
- Situations will change.
- It is up to you to:
 - Manage relationships
 - Manage the project
 - Manage change

Simulation details contd.

- Each week, you should be communicating with your development partner.
- Your partner will provide feedback.
- In some instances, you will provide your partner and faculty advisor with a plan (e.g. needs assessment and capacity-building plan).
- We will provide simulated outcomes of that assessment or plan.
- The simulated outcome will only be as good as your plan, so you must be *meticulous about details in your plan.*

Technical solution

- The technical soundness of your proposed solution is fundamental to the project success
 - Human, social, and institutional issues are important, but equally important is the technology solution.
 - An excellent participative assessment and inspired capacity building are for naught if the technical solution is not functional and robust.
 - Know the domain
 - ICT/Computing
 - Human needs by domain (healthcare, agriculture, etc.)
 - Know the limits of the technology

Challenge #1

- Understand the problem
 - o Do background research on the partner organization and the community in which your project will be implemented.
 - o Learn to ask the right questions and to collect information in a professional manner.

Assignment #1

- Meet with your team and discuss a strategy for addressing the problem. Make sure you distribute the work effectively according to the strengths of your teammates.
- Prepare a list of questions to ask your partner.
- Get feedback on your strategic plan and list of questions from your faculty advisor.
- Set up a meeting with your partner and assess the problem using your list of questions as a guide
- Produce your first report (*due Wednesday October 3 via BlackBoard*) describing the following:
 - The community and partner organization you are working with
 - A clear articulation of problem you propose to solve (your partner should agree with you on this)
 - The challenges you expect to face
 - Any other details relevant to understanding the problem



Challenge #2

- Propose a solution
 - Make sure the solution serves the needs of your partner and the community.
 - Make sure your partner understands the strengths, weaknesses, and costs of your proposed solution.
 - Think carefully about the sustainability of your proposed solution.

Assignment #2

- Meet with your team and design a solution to the problem you proposed to solve. Make sure you get frequent feedback from your faculty advisor and from your partner.
- Make sure you think about milestones, timeline, budget, and observable outcomes, that you design a set of capacity-building measures to implement with your partner to create sustainable change in the community you are working with, and that you include an evaluation plan to assess the project.
- Produce your second report (*due Wednesday October 24 via BlackBoard*) describing the following:
 - An executive summary of your report
 - An updated understanding of the problem and the challenges you faced
 - Your proposed complete solution (including evaluation plan etc.)

Etc.

- Additional directions will be forthcoming later in the semester
- The project will culminate in a final report and final presentation due during finals week.
- Included in your final presentation will be a demonstration of your working system.

Project Haiti

- **Team:** Sonja Duric, Evan Hoke, Katherine Menzies, Alif Sajan, Sataja Parulekar, Wendy Shutt
- **Faculty Advisor:** M. Bernardine Dias
- **Partner:** Ms. Sarah Belousov (sarahtbw@cs.cmu.edu), hospital administrator
- **Partner Organization:** Hopital Albert Schweitzer (<http://www.hashaiti.org/>)
- **Community:** Population of Deschapelles, Haiti
- **Synopsis:** People from the surrounding mountainous communities walk 4-6 hours each way to get to the hospital. Once they reach the hospital, they stand in line for hours to see a doctor and often return home unable to see a doctor because the line was too long. The hospital has requested you to propose a scheduling system that allows its community health centers to work with the hospital to schedule patients so that adequate care can be provided to all.

Project Palau

- **Team:** Madeleine Pitsch, Jessica Kang, Wilson Tsao, Ed Yampratoom, Ermine Teves
- **Faculty Advisor:** Joe Mertz
- **Partner:** Kevin Purtell (kpurtell@andrew.cmu.edu) playing the role of several Ministry of Health staff people
- **Partner Organization:** Palau Ministry of Health (<http://www.palau.gov.net/minhealth/mohealth.html>)
- **Community:** Palau
- **Synopsis:** The Ministry of Health (MOH) works to build a “Healthy Palau in Healthful Environment.” The MOH is subdivided into two bureaus. The Bureau of Hospital and Clinical Services provides emergency and special services. The Bureau of Public Health Services provides both primary and preventative services. You will be working within Public Health to help them use technology better to meet their information management needs.



The Numbers and Labels of Poverty

Joe Mertz

Fall 2007

Carnegie Mellon



Take away points

- For any ICTD project, it is important to measure success.
- But measurement is fraught with pitfalls
 - Assessment measures can themselves be (or become) negative labels.
 - Good baseline data can be hard to obtain
 - Comparison across communities is difficult

The challenge as researchers...

Academic / bureaucratic self-gratification:

Excerpted from John McKnight article in *the Other Side*

<http://www.northwestern.edu/ipr/abcd/servanthood.html>

"Mrs. Jones, we're from such-and-such. We're doing a survey. Can you tell me how far you went in school?"

She looks down a little and says, "Well, I just got through tenth grade." So they write on the clipboard, "Dropout. Two years." Not "educated ten years" but "dropout two years."

Then they say, "I wonder if you could read this to me."

She looks at it, embarrassed. "No. I can't read."

"Illiterate," they write. Then they say, "Just now you squinted your eyes. Do you have trouble seeing?"

"Yes. I think I need glasses."

"Visual deficit," they write. "Do you have any children?"

"Three daughters, ages fourteen, sixteen, and eighteen."

"Do any of them have children?"

The fourteen-year old has a child, and the eighteen-year-old has a child.

"Teenage pregnancy," goes on the clipboard.

Then they say, "We're going to get you some help. Just wait.

We're going to make a service center here." And they cash in their needs inventory for a GED dropout training center and three people who work there, for an illiteracy program with four staff people, for a neighborhood optometrist who is responsive to the community, and for a new teenage-pregnancy counseling program that gets the schools more money.

Why are the poor poor?

- What are the common perceptions and misconceptions of why poverty exists?
- It is okay to be non-PC and/or represent views that you don't personally hold to be true.
- Our intention is to illuminate the ideas about the poor that exist in our culture, so that in this course we can assess their validity.

Labeling the poor

- Herbert J. Gans, in *The War Against the Poor* describes the labeling of the poor.
- Labels:
 - Descriptions of people based on imagined knowledge
 - Used primarily to differentiate people in a negative or pejorative way
 - *“they may extrapolate from small kernels of truth about some people to large imagined untruths that are applied to everyone in a group.”*

Terms

- *Labels* should be distinguished from *terms*
- Terms are meant to describe, not stigmatize
- Problem: terms are often turned from being descriptive to being negative
 - E.g.
 - Welfare recipient

Fairly new labels

- Illegal aliens
- Terrorists
- Bottom of the pyramid
- Emerging markets
- Emerging regions

What associations do you have with...

- Welfare queen
 - Working poor
 - Underclass
-
- How is the “deserving” differentiated from the “undeserving” poor?

Label life-cycle

1. Label-maker: academics, journalists, practitioners working for or against the poor.
2. Alarmists persuade the general public that the labeled is a threat. Counters describe the magnitude.
3. The populace must find it compelling enough for it to enter common usage.
 - (Compelling, but not necessarily true.)

Source: Herbert J. Gans, in *The War Against the Poor*



Which is more prevalent in the United States?

- Dying from a firearm assault or suicide?
- Dying in a bicycle accident or alcohol poisoning?
- Dying from contact with hot tap water or from a flood?

Source: <http://www.nsc.org/lrs/statinfo/odds>



Beware “availability bias”

- People make estimates of the frequency of an event or the prevalence within a population based on how easily they can bring instances to mind.
- What you notice, or has been brought to your attention, does not necessarily reflect the base rate.
- Therefore be leery of making frequency or prevalence assertions without objective data.

Bottom line concerning the poor

- Watch for preconceived notions & labels
- Question common assumptions
- Collect real data



Options in studying poverty



There are many ways to study poverty

- Describe a situation
- Do an analysis
- Develop a model
- Perform a needs assessment
- Conduct a feasibility study
- Document baseline data
- Develop a prototype
- Test a prototype

For each of these, we need to measure data

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How?



Measuring poverty

- For any research we intend to do, we need assessment data.
- Of course what data we need depends on what we are trying to address
- But it also depends on
 - What data exists
 - What is measurable

Lots of choices - scale

- At what granularity can you measure?
 - Global
 - Country
 - State
 - County
 - City
 - Neighborhood
 - Household
 - Individual

Lots of choices - indicators

- What indicators can you use as a measure?
 - Income
 - Consumption
 - Education
 - Health
 - Access to services
 - Risk
 - Vulnerability
 - Social exclusion
 - Access to social capital
 - Etc.

Lots of choices - collection

- How do you find/collect the data?
 - o Country-level Census
 - o Multi-country composites
 - o Regional/state/city data
 - o Local / individual surveys

Interesting example...

- Is it more expensive to be rich or poor?

Suburbs of Mumbai (Bombay)

	Dharavi (shantytown)	Warden Road	Ratio
Credit (APR)	600-1000%	12-18%	60-75x
Water (100 gal)	\$0.43	\$0.011	37x
Phone (cents/min)	4-5	2.5	2x
Diarrhea Meds	\$20	\$2	10x
Rice (\$/kg)	\$0.28	\$0.24	1.2x

Source: Eric Brewer, talk given at Carnegie Mellon Fall 2006



Consider another measure

The Poverty Line

- E.g. Pittsburgh Metropolitan Area data

Metropolitan Pittsburgh

- What is your impression of poverty in Greater Pittsburgh / Western Pennsylvania?
- How do you think it compares with the 50 largest metropolitan areas in the US?
- What is your perception of the conditions of African Americans vs. white populations in this region?

Pittsburgh MSA

- Median Household income (1999)
 - Blacks - \$22,271 (rank: 50th)
 - Whites - \$39,025 (rank: 50th)
- Per capita income (1999)
 - Blacks - \$13,176 (rank: 46th)
 - Whites - \$21,721 (rank: 49th)

Source: 2000 census, presented in Black-White Benchmarks for the Pittsburgh MSE, Bangs et al. (2004). Can be found at:
<http://www.ucsur.pitt.edu/Benchmarks%202004.htm>

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What is the value of household income versus per capita income?

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What does rank indicate in terms of poverty?

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What \$22,271 mean in absolute terms?

How do we assess how much of a problem that is?

What other measure can we use to indicate poverty more directly?

Pittsburgh MSA

- Poverty rate
 - o Blacks - 31% (rank: 3)
 - o Whites - 9% (rank: 4)

Source: 2000 census, presented in *Black-White Benchmarks for the Pittsburgh MSE*, Bangs et al. (2004). Can be found at:
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Pittsburgh MSA

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Whoo Hoo! We are almost number one!

Wait, is 3 and 4 good or bad?

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- Poverty rate

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Whoo Hoo! We are almost number one!

Wait, is 3 and 4 good or bad?

What does a “Poverty Rate” measure?

US Govt. Poverty Line

- Devised in early 60s
- Took Dept of Agriculture guideline for food costs when funds are low and multiplied by 3 (typical share of food budget)
 - I.e. food was then typically 33% of a household budget
- Since then, adjusted for inflation.

What problems can you see?

- How might it overstate poverty?
- How might it understate poverty?

Poverty line critiques

- **Overstates poverty:**
 - Share of food in budget now around 1/6
 - Does not take into account public assistance
- **Understates:**
 - Expenses of today's life are understated, including child care, transportation.
- **Is absolute, instead of relative**

Difficulties of comparison

- How do you compare rates in different areas.
 - Consider the cost of living in Pittsburgh versus San Francisco.
 - How do you compare poverty rates in Pittsburgh with Phuket?
 - Currency exchange rates?
 - Purchasing Power Parity?
 - Absolute or Relative?

Difficulty of cross-cultural comparison example

- In TCinGC program, what is a fair stipend for students?
 - o Pohnpei, Federated States of Micronesia
 - o Ebeye, Marshall Islands
 - o Koror, Palau
 - o Hambantota, Sri Lanka
 - o Puducherry, India

Challenges to measuring

- Identifying appropriate measures
- Gathering reliable data
 - Entrée into the community
 - Finding the right people
 - Gaining trust to receive accurate data
- Politics
 - Ideology
 - Budget
- Interpreting data