

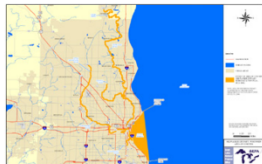
WORKING WITH THE URBAN ENVIRONMENTAL EQUITY RESEARCH: INVESTIGATING THE SOCIAL IMPACTS OF ENVIRONMENTAL REMEDIATION

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Introduction

Background:
 Environmental Protection Agency (EPA) has identified many areas near the Great Lakes as "Area of Concern" (yellow part in picture) where past actions have increased the toxicity of local water ways. Since the 1970s state government have spent millions of dollars on removing and cleaning up these rivers and now focusing on the study of human dimension and the water recovery program.



Goal:
 To understand the underlying correlation of different human dimension. To accomplish our goals, we will use patterns of change using government data like the US Census and use video recordings to tell the stories of residents, community organizers, and experts who have lived near and thought about the area for a long time.

Challenges and concerns:
 The concerns communities have about the cleanup not being addressed during clean-up efforts? How do different groups decide if clean-up is worth the cost?

Research initiative program
 With faculty members on projects related to environmental equity, we aim to help students develop technical skills, and help develop theoretical frameworks to create research questions and designs to interpret data.

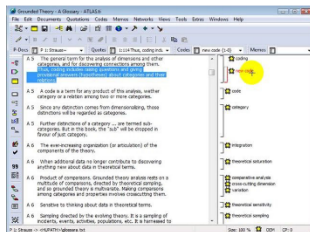


Members conducting an interview

The Semester's Work:

Research Methods:

—Qualitative research with several interviews around 30 to 45 minutes conducted by senior research members. Interviewees are mainly local residents, organizations and experts in related environmental fields in the Milwaukee area.
 —Coding with usage of Atlas.ti, a software helping researchers to efficiently reanalysis the records interrelationship between keywords and factors.



Research Process:

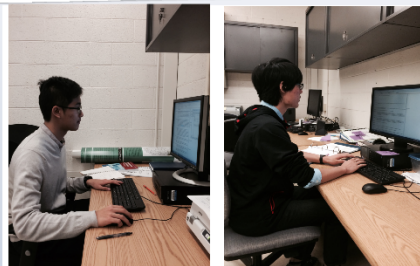
1. Group designation (3 groups) 1/25
2. One Copy binder assigned per group
3. Rough coding in the binder 1/25-3/8
4. Group discussion for interesting findings 2/9, 2/16, 2/23, 3/9
5. Synchronize progress 3/9
6. Start of formal coding with software 3/9-3/29
7. Draft of report for the Illinois-Indiana Sea Grant 4/2-

Research results:

Over all positive attitudes towards cleanup progress
 —"River is improving"x5, "environment is more favorable"x2, "communities are getting better"x3, "moderate to good quality of living" "City changed better"...
 Built up relationships among fish, park, lake, river and stakeholders.
 —"local people...fishing as main income...", "need to educate people about PCB in fishing-risk", "Lincoln park in need of better security..." "Intergenerational conflict (pollution is a concern for future generations, not their generation)" "dumping sewage into the lake", "cancer risk from pesticides"...
 Better understanding of local community and environment status
 —"city behind in infrastructure" "Ageing sewage system", "racism on the part of the interviewee" "Small houses crowded with people", "intimidating/unsafe bus and public transportation" "funding issues", "Segregation within community" "Disconnect from nature..."



Beautiful river scenery after remediation program.



pictures of VERY VERY hard working researchers.

Personal Achievements

- Literature review and organization
- Understanding the difficulties appears in a research(long term, huge data, great patience, verbose and boring analysis and hardworking.)
- Using Reference works
- Data collection, analysis, and organization
- Conducting ethnographic interviews (going to local area and conducting interviews with volunteers with video records)
- Coding qualitative data (Atlas. Ti)
- Critical thinking (considering the relationship between the stakeholders in the interview)
- Making meaning of data (reading interviews and extract useful data)
- Understanding research process as a whole
- Communicating respectfully with research subjects
- Empathizing with research subjects (poor peoples, vulnerable individuals, affection of local people toward homeland)
- Organization (professor—team leader—members)
- Managing time better (group members with different schedules works in divisions, records and update working progress online and meet weekly.)
- Performing more precise work (group members review for same article by turns in case of losing any useful information)
- Learning new file formats (interview format files using bundles, proper name format of file in order to manage and search for the future use)
- Learning software programs (using Atlas.Ti)



A weekly group meeting discussing coding schedule, problems and new findings.

Ideas

Biggest thing learned?

KZ: Gained knowledge about how research process are like and learned to read in an efficient way.
 NL: Understanding the importance of persist in research and lone reading material. Understanding how to teamwork and communicate with others.

Hardest aspect of the work?

KZ: Deciding which reading material is related to the research purpose.

NL: Filtering out unrelated keywords and information in rows of corresponding paragraphs.

Favorite part?

KZ: Eating potato pizza for the first time
 NL: Eating spaghetti pizza for the first time
 How does it relate to your academic work?
 KZ: Provide background knowledge for possible further learning in Civil Engineering
 NL: Understanding more in society which is vital for my future engineering career ethnic.

Conclusions

-Understanding parameters (fish, park, lake, rivers and stakeholders) and the roles they played in local community though river recovery program.
 -Provide guideline for future pollution eradicate program.
 -Deep analysis on social structure, class, and ethnical groups in social prospect.
 -let vulnerable group (individuals and small families) to have release their voice so that social equality are individual benefits are protected.
 -more respect toward all researchers!

Finally, thanks Professor Cutts, Lydia, Rachael, Megan, researcher initiative program and members in urban environment equal lab!

Acknowledgment

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