Audience Assessment Tools: Community Knowledge, Attitudes, Practices and Barriers

Karlyn Eckman, U of M
Clean Water Summit
September 12 2013
Presentation outline:

- Introduction/context
- The KAP study method
- The Como Lake KAP Study
- Uses and Applications
- Summing up
Introduction

- Few water quality projects evaluate outcomes, especially on audiences (do people adopt?)

- Pressure to show results!

- We’ve experimented with two different audience assessment and evaluation methods:
  - SIPES (Social Indicators Planning and Evaluation System)
  - KAP (Knowledge, attitudes and practices) studies
Why did we focus on the KAP study method?

- Conventional methods of audience assessment and program evaluation were not working well.
- Cost and complexity arose during testing of EPA’s social indicators method (SIPES).
- The Illinois social baseline method was not well suited to program evaluation.
- AEA conferences highlighted the lack of a practical method for evaluating WQ projects.
- Lots of local demand for simpler, lower-cost methods.
What’s a KAP study?

- A KAP study is a social research method (survey) that measures changes in human knowledge, attitudes and practices in response to a specific project activity, usually education or outreach.

- KAP studies can also detect people’s barriers and constraints.

- Measuring changes in knowledge, attitudes and practices are the minimum values for evaluating outcomes on audiences (AEA).
KAP studies emerged as an interdisciplinary research method in the 1930s in developing countries.
KAP study characteristics

- Studies are done twice: pre/post project ➔ two data sets
- Each study is customized and unique
- Everything is local: KAP explores issues with local relevance
- KAP is a research method, not a theory. Can be used with most theoretical models.
- Limited focus on three core constructs:
  - Audience knowledge about x
  - Audience attitudes toward x
  - Audience practices related to x
What’s unique about the Minnesota KAP studies?

- Our studies begin with a team-based **gap exercise**: “What don’t we know about our audience, but should?”

- What is our **theory of change**?

  Will people respond to an incentive? What do we expect will happen as a result of our project? How can we measure that?
How a gap exercise works:

- 2-3 hour brainstorming session with sticky notes
- Notes are put into a gap table
- The gap table is converted to a draft questionnaire
- Draft questionnaire is circulated, revised and pre-tested
Flexible survey management

On-line link

Door-knocking

Workshop

Mail
Como Lake Community Clean-up for Water Quality – Saint Paul, MN

- Project funder: Capitol Region Watershed District (CRWD)
- Project implementers: Freshwater Society and Como Lake Neighbor Network (CLNN)
- One-year project; two neighborhood leaf clean-ups
- Project purpose: Reduce phosphorus loading in Como Lake
- **Evaluation plan:** Measure residents’ knowledge, attitudes and practices before and after the clean-ups
Como 6: Control

Como 2: Treatment
Knowledge values

- We didn’t expect major increases because first-round results for knowledge were relatively high.
- Very high knowledge of storm sewer connections from lawns to Como Lake, showing residents’ awareness of the connection of their lawns to the larger ecosystem (e.g. water bodies).
- Moderate knowledge about phosphorus and nitrogen.
- Despite the short six-month period between the two surveys, there was a modest positive shift in respondent KAP values.
Attitudes values

- Very high level of concern for water quality.
- Historic and deep affinity for “our” lake regardless of location in the subwatershed.
- High awareness and willingness to help elderly and disabled homeowners.
- Shared sense of civic duty and environmental stewardship.
- Many shared stories about multi-generational affinity for Como Lake.
- Values seem to be deeply held.
Practices values

- Residents self-reported very high levels of raking, bagging and composting of leaves and grass clippings.
- There were a few but highly visible “offenders.”
- Many households assist neighbors with yard chores.
- Fall leaf-raking was found to be an ongoing task. Most people raked multiple times.
Constraints/barriers

- Main barrier is lack of an organized bag pick-up, and strong preference for a community-wide leaf-bag pickup.
- General lack of involvement and support from the City
  - Bag pick-up
  - Condition of storm drains
  - Street sweeping schedule
- Aging demographic – many respondents are elderly and less capable of yard care
- We don’t know what’s actually in the leaf debris (trash, sand and sediment, road salt, household hazardous waste, etc.). Need more information.
Zooming Out: A Summary of Minnesota KAP Studies

- 27 individual KAP studies completed or in process
- Focus mainly on water quality issues
- Mostly done by/for watershed districts or NGOs
- Very diverse audiences

So, how have people used KAP study data?
#1: KAP = planning tool

- Helps staff think through the project’s theory of change:
  - Theory of planned behavior v. social learning theory
  - What results do you expect for your particular audience?
  - Why would people adopt this and not that?
  - Why should an incentive work with this audience?
- KAP data helps staff to develop a civic engagement strategy, and which media/messages to use
#2: KAP = educational tool

- Can identify existing level of audience knowledge
- KAP data can identify areas where knowledge can be improved
- Allows you to build messages on what people already know
- Helps avoid “dumbing down” messages
- Helps avoid endlessly repeating the same messages
Otter Tail County Pre-KAP messaging (2008)

View of lake is blocked

Audience perceives a “wall of vegetation”

That “Up At The Lake” Feel

Lakeshore Landscaping

Stabilizing and Beautifying
Post-KAP messaging (2011)

Clear views of sky and water  Good sightlines for children (safety)
#3: KAP = attitudes gauge

- Can identify critical attitudes upon which to build messages
- Near-universal concern for water quality
- Deep affinity for “our” lake
- Build messaging on people’s concern for clean water
#4: KAP = evaluation tool

- KAP data provides evidence of change
- Pre/post KAP datasets are compared during evaluation
- Offers proof of project outcomes for reporting
- Can be combined with unobtrusive observation

“Boat-by”- Itasca County
#5: KAP = engagement tool

- “We asked your views about stormwater issues in Amity Creek...this is what you told us...”
- Use KAP results as basis for community discussion and action
Is the KAP study cost-effective?

- Costs have run from about $2,500 to $20,000 per study

- 77% of practitioners report that KAP is cost-effective; none report that it is not

- Users report that studies have resulted in more effective programs and outreach
Some caveats...

- KAP is not “quick and dirty”
- There is a KAP protocol prepared for MPCA
- Training is needed for new practitioners
- IRB and federal human subjects research rules apply
Summing up...

- KAP is useful for planning, gauging attitudes and preferences, identifying engagement strategies and educational messaging

- Valuable evaluation method – provides clear evidence of results

- We conclude that it is a flexible method with reasonable value and utility for project staff
A question for you...

Are you interested in a hands-on “boot camp” to learn how to do a KAP study?
Acknowledgements

- Minnesota Pollution Control Agency
- Lynne Kolze and Kim Nuckles, MPCA
- EPA 319 funding
- Freshwater Society and Capital Region Watershed District
- U of MN Water Resources Center
- U of MN Department of Forest Resources
- Local partners