



**A FrameWorks Institute eZine**  
**The Storytelling Power of Numbers**

"Upon this gifted age, in its dark hour, Rains from the sky a meteoric shower Of facts....they lie unquestioned, uncombined.

Wisdom enough to leech us of our ill Is daily spun; but there exists no loom To weave it into fabric....

Edna St. Vincent Millay from Huntsman, What Quarry?, (1939)

Sometimes framing lessons come from the most unlikely sources.

I was in the midst of FrameWorks' annual financial audit when our auditor remarked, "The spreadsheet is really boring. The numbers aren't telling a story." He proceeded to organize the numbers under topical headings, showing how much of our revenue and expense related to work on the environment, children and family issues, and so on. And now the numbers told a story about FrameWorks' issues priorities.

This event reminded me of a question from a participant in a recent training on rural issues for the W.K. Kellogg Foundation. It was a question we hear over and over again. "Do you mean we have to stop using numbers and tell stories instead? We can't do that, we're policy wonks." To which our smart program officer, a mass communications scholar herself, replied, "It's not numbers versus stories, it's both."

But only when I put the two events together did they clarify for me the lessons that need to be learned about the relationship between these two framing elements. Here are five lessons for using numbers more effectively to advance social issues.

Lesson #1: Unless numbers are married to a story, they are unlikely to mean anything to the public.

Advocates like to load up on numbers. We see many brochures and fact sheets that are simply long, bulleted lists of numbers lacking any useful interpretation.

What do we know happens when communications is inadequate? People default to the pictures in their heads. Those pictures are typically dominant frames on an issue that reflect media narratives and are unlikely to result in attribution of public responsibility, engagement and problem-solving.

The better practice in fact sheets and brochures is to provide the meaning *first* and *then* use the numbers to support that meaning.

This practice also directs you to understand the larger story that the numbers are meant to illustrate. What is the organizing principle, or frame, that the numbers support? This leads to our second lesson.

### Lesson #2: Too often numbers are used to tell one story: Crisis.

Advocates tend to use numbers to attest to the fact that we have a Big Problem, so big that it is now a Crisis, with all numbers being variations on the evidence, showing how it affects this group of people living in this place or over this period of time.

In fact, so entrenched is this frame as a storytelling narrative that advocates often don't realize that they are using numbers to tell the Crisis story.

So what's wrong with this story?

FrameWorks research across issue areas — children and family, poverty, environment, economy, health — suggests that the crisis frame is not likely to engage people in wanting to fix the problem. Rather, the Crisis frame incapacitates them, leading them to conclude the problem is too big to fix, government can't fix it, and no solutions exist.

Importantly, numbers are rarely used to tell those aspects of the story: solutions exist, they have proven effective, government can play a role, and the problem can be addressed incrementally. On issues like global warming and health care, where the size of the crisis tends to remind people of the necessity to protect their own situation, the Crisis frame actually disengages people from public solutions and redirects their energies to adaptive behavior (e.g., "I'll buy our beach house a block from the ocean just to be safe") or cocooning (e.g., "I'll make sure my family has the best insurance I can buy.")

Moreover, when advocates *do* explain solutions, these are often dwarfed by the Crisis frame and appear to the public as meaningless or irrelevant. When the numbers are used to describe a Huge Problem, followed by numbers that describe Small Solutions, advocates reinforce the sense of futility that comes with the Crisis frame.

A better practice for advocacy communications is to ask: what is the story that our numbers could be used to tell that allows people to see solutions? Our colleagues at Action Media in Minneapolis have suggested that the Giantkiller (small power defeats

major adversary, e.g., David and Goliath) story is a better way to portray Big Problem + Solution. The Little Engine that Could is a story about Ingenuity triumphing over Big Problem. And these stories can be told with numbers as the supporting documentation.

Lesson #3: Social math unifies the narrative and the numbers.

Social math is a technique pioneered by our friends in media advocacy: the Advocacy Institute and the Berkeley Media Studies Group. You can read more about it in *News for A Change: An Advocate's Guide to Working with the Media* (Wallack et al, Sage Publications:1999). Social math blends stories and numbers by providing comparisons with familiar things. It works by analogy. For example, Wallack et al offer this example:

*Community residents near a gasoline refinery noted that the plant emits 6 tons of pollutants per day - or 25 balloons full of toxic pollution for each school child in the town.*

Why is this effective?

First, it connects the numbers to meaning, by visually painting pictures in our heads. Six tons is an unimaginable number; 25 balloons per child is comprehensible and visual.

But even more interesting is the fact that the analogy provides the framing cues missing in the raw numbers. It helps establish the Levels of Thought that inform frames — including Values (Level One), Categories of Issues (Level Two) and Specific Policies (Level Three). Numbers, like policies, are Level Three information — comprehensible largely by experts only. By explaining one number in terms of another, this approach thoroughly defines the problem. Pollutants (the Level Three Issue) are "about" Health (Level Two Category of Issue) and what's at stake is our children (Level One Legacy).

A caution in the use of social math: because it relies on the mapping of one well-known frame onto a lesser-known issue, it can backfire if you choose the wrong value for the comparison. For example, here's a great soundbite from the arena of foreign policy:

*Most people in Africa support their entire families on the equivalent of what Americans spend on pet food.*

Great, memorable quote — so what's the problem?

Map the values: The speaker was trying to make the point that Americans have plenty of money to spend on extravagances when they could be putting their extra money to important acts of charity, and thus are being selfish when they don't share their wealth with the rest of the world. What the audience actually heard is quite different, and this understanding relates directly to the social math equation that was set up. What the audience heard, as confirmed in our focus groups, was that you want me to choose

between my pets whom I love and care for, and people in other countries. The social math set up a false choice that people didn't want to make — because the value invoked was nurturance, and people wanted to be nurturant in both examples.

	<b>African example</b>	<b>American example</b>	<b>What Speaker Intended</b>
<b>L1</b>	Nurturance	Nurturance	Selfishness
<b>L2</b>	family	(extended) family	charity
<b>L3</b>	food	(pet) food	money

So paying attention to the values inherent in your social math equation is an important consideration in determining its effectiveness.

Lesson #4: Use numbers to tell causal stories.

Too often the use of numbers in advocacy communications is reduced to their descriptive power: the problem is real and here's the evidence, or the problem is big and here's who is affected and where.

But numbers can also be used to tell more analytic stories. Simple causal sequences are important components in helping people understand: context, human impacts, prevention, and the efficacy of solutions. Indeed, this use of numbers is a key contribution to changing a story from episodic to thematic. (For more on these concepts, see the definitions and exercises at [www.eworkshop.frameworksinstitute.org](http://www.eworkshop.frameworksinstitute.org)).

It's easy to outline the story your numbers need to tell as a chain of events in which the influences of each are apparent:

Sea levels rise because our cars are pumping more and more carbon dioxide into the air, fish die in the oceans, and the food chain is disrupted. Here are the facts: And here's how it could work differently.

**OR**

Salaries for CEOs at major companies rise 430%, profits decline 10% worldwide, and thousands of people are let go from their jobs in Minnesota to hold the bottom line on profitability for a small number of shareholders around the world. With better planning...

Lesson #5: Uninterpreted numbers tell a story of random mayhem.

When advocates use numbers to convince people that the problem exists, hoping that one number will finally prove the tipping point to engagement, they do themselves a

disservice. The story behind the numbers is too often one of naturalism: the universe is a hostile and chaotic place where Nature rules and human actions are predetermined or irrelevant.

What's wrong with this picture? Once established, this frame shuts out notions of human causality, prevention and government responsibility.

To avoid that serious problem, make sure the numbers are used to describe what could have been done to prevent the problem, how human action or inaction has contributed to the problem, and to assign responsibility by showing the potential impact of government intervention.

Don't let your fact sheet leave readers with the take-away that Stephen Crane described in his famous poem:

A man said to the universe:  
"Sir, I exist!"  
"The fact has not created in me  
A sense of obligation."

***About FrameWorks Institute:*** The FrameWorks Institute is an independent nonprofit organization founded in 1999 to advance science-based communications research and practice. The Institute conducts original, multi-method research to identify the communications strategies that will advance public understanding of social problems and improve public support for remedial policies. The Institute's work also includes teaching the nonprofit sector how to apply these science-based communications strategies in their work for social change. The Institute publishes its research and recommendations, as well as toolkits and other products for the nonprofit sector at [www.frameworksinstitute.org](http://www.frameworksinstitute.org).

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