Public Perceptions of Climate Change in New Hampshire

Coastal New Hampshire Climate Summit

April 12, 2013

Larry Hamilton
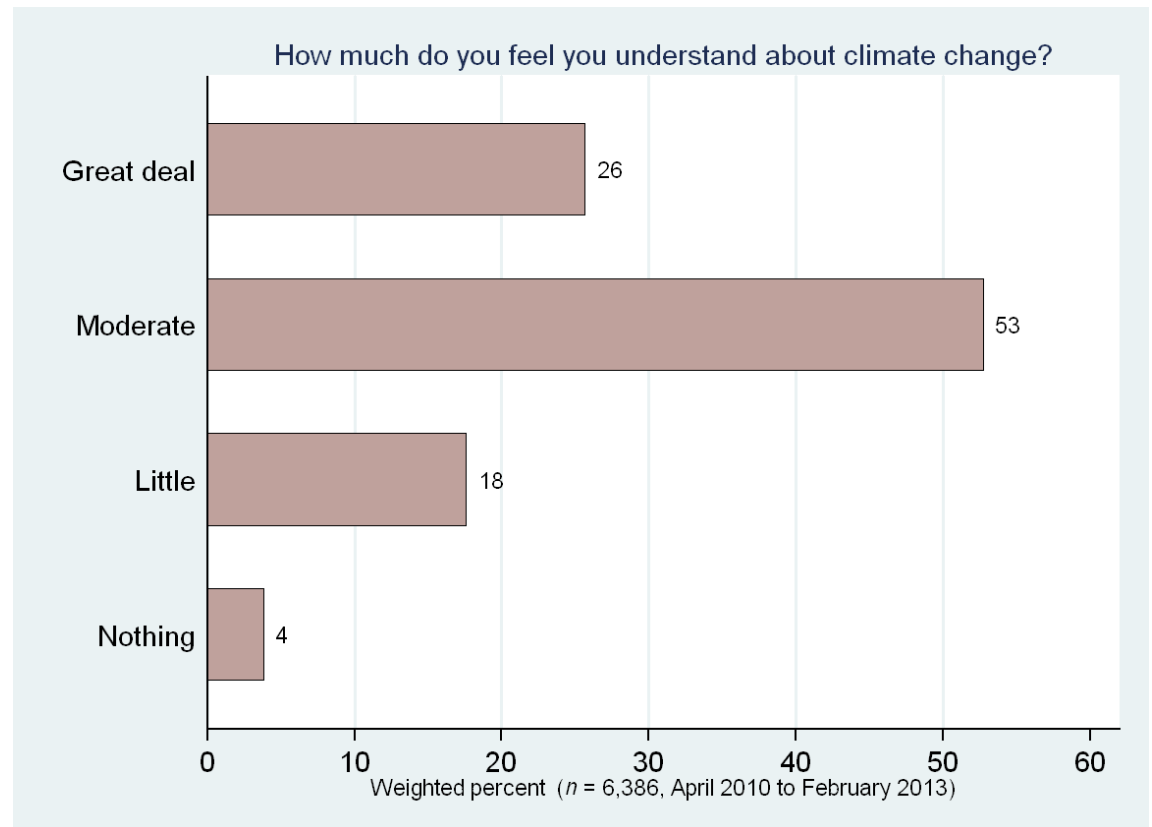
Carsey Institute

UNH

Since April 2010, the Granite State Poll has carried 2 basic climate change questions

- 13 polls to date, almost 7,000 interviews
- NH results consistent over time, and with a 2011 national survey
- Starting in 2011, broader mix of questions
  - Knowledge
  - Other environmental/science topics
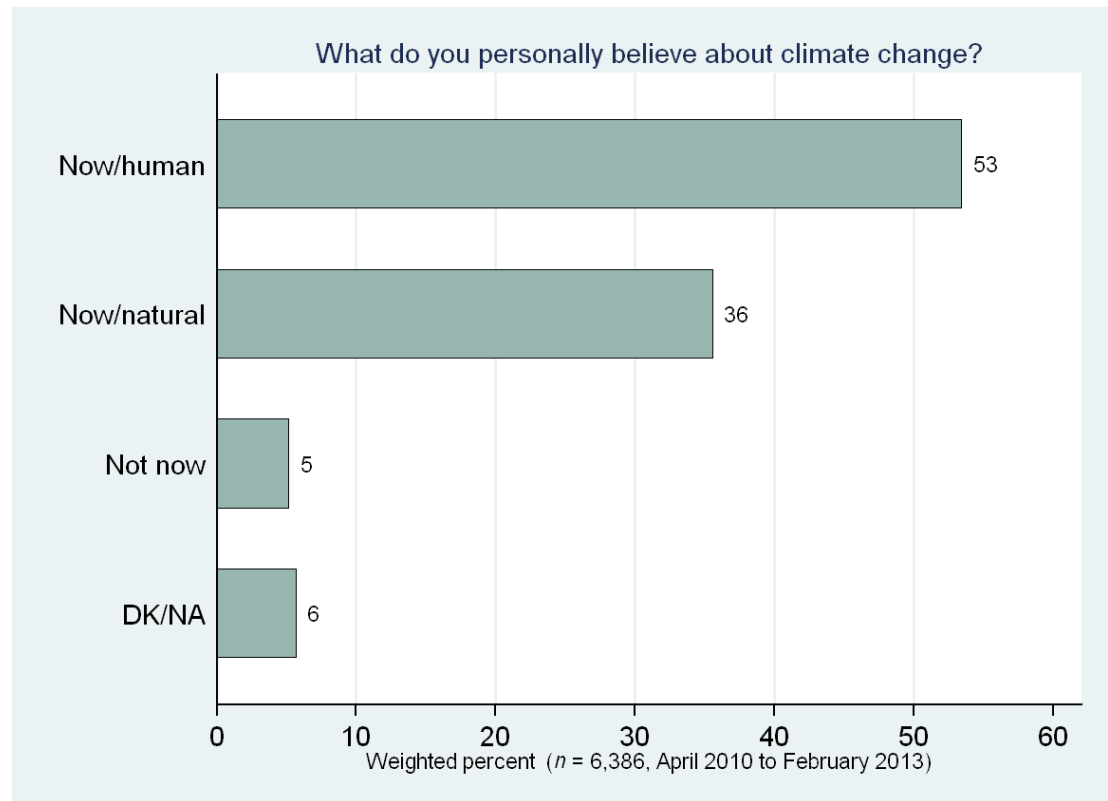- Research articles, reports and a blog present findings

"Next, I would like to ask you some questions about the issue of **global warming or climate change**. How much do you feel you understand about this issue ... would you say a great deal, a moderate amount, only a little, or nothing at all?"

- A great deal
- A moderate amount
- Only a little
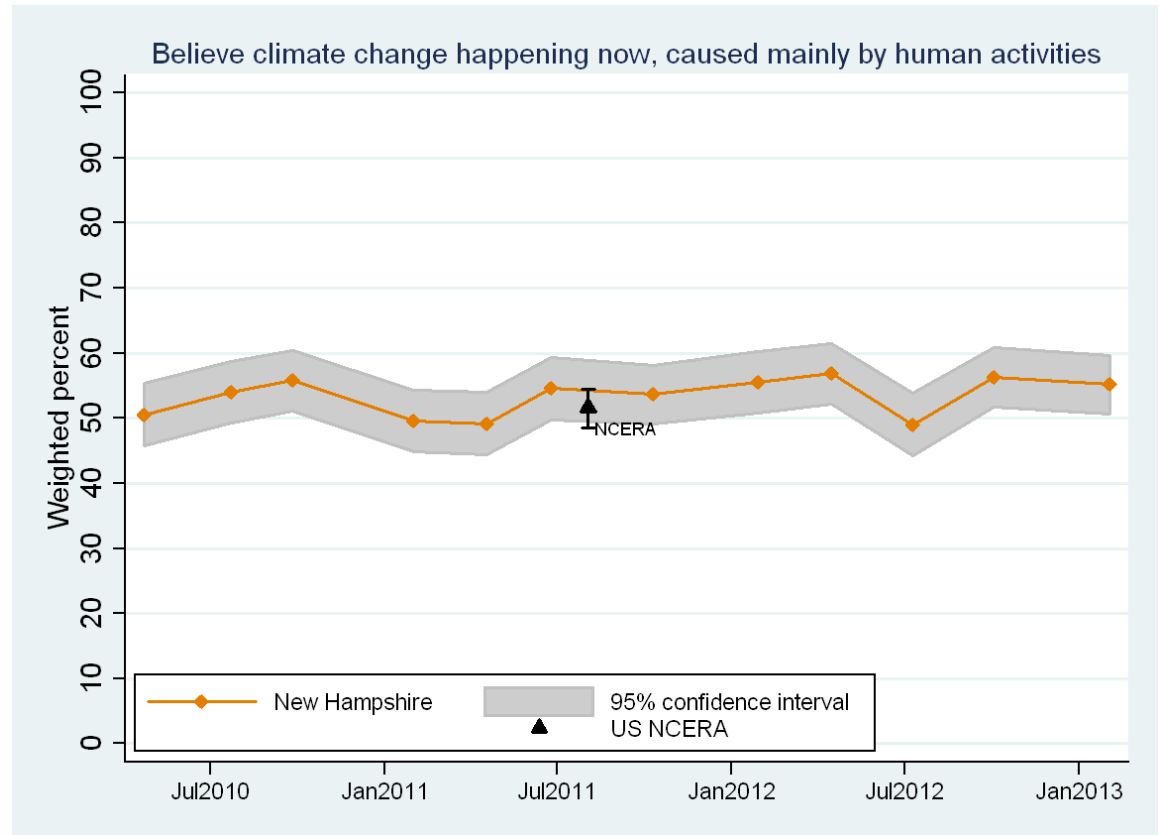- Nothing at all

How much do you feel you understand about climate change?

Category	Weighted percent
Great deal	26
Moderate	53
Little	18
Nothing	4

Weighted percent (n = 6,386, April 2010 to February 2013)

"Which of the following three statements do you personally believe?"

- Climate change is happening now, caused mainly by *human activities*.
- Climate change is happening now, but caused mainly by *natural forces*.
- Climate change is *NOT happening* now.
- don't know/no answer

What do you personally believe about climate change?

	Weighted percent
Now/human	53
Now/natural	36
Not now	5
DK/NA	6

Weighted percent (*n* = 6,386, April 2010 to February 2013)

Responses have been surprisingly stable over the past 3 years

- About 53% of NH residents believe change is happening now, caused mainly by humans

- Similar to 2011 national survey results

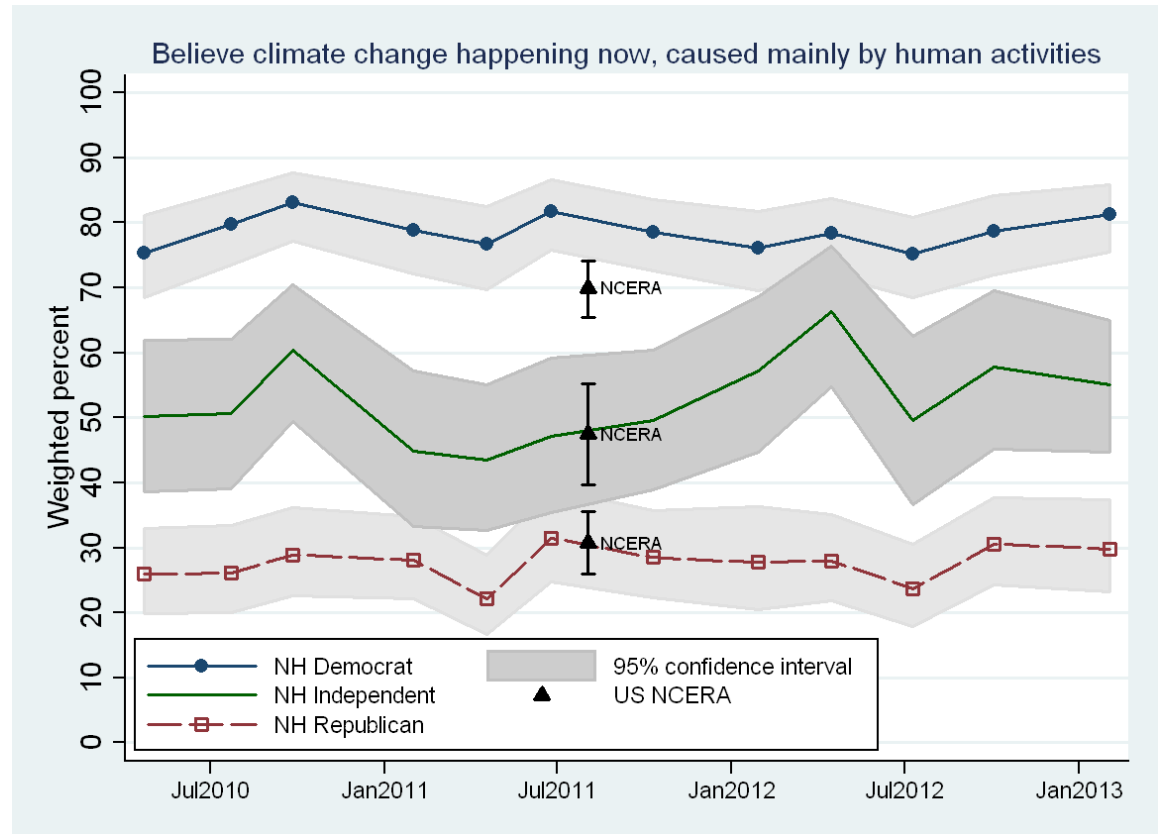Believe climate change happening now, caused mainly by human activities

Gender, age and education correlate with climate beliefs, but political party dominates beliefs about climate change.
This is among the most powerful "wedge issues" on surveys.
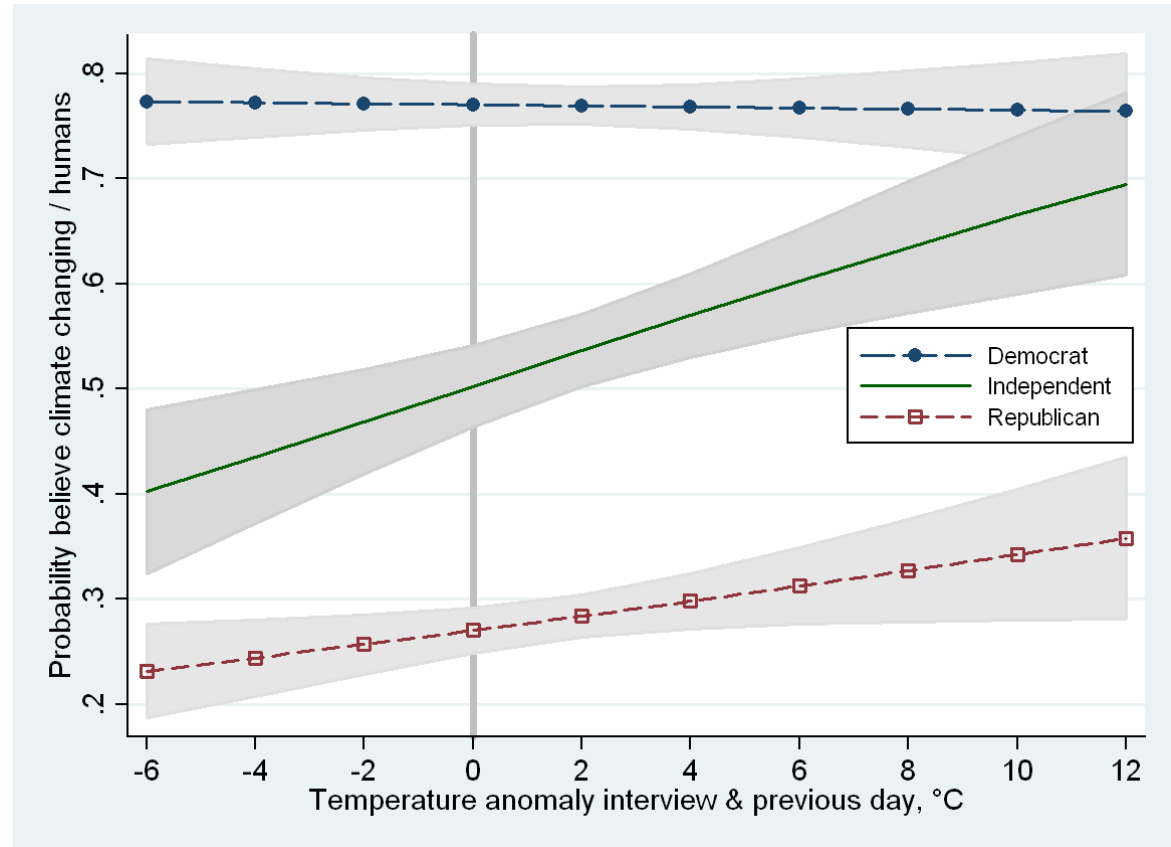
79% of Democrats

53% of Independents

28% of Republicans

believe that human activities are changing the climate

Believe climate change happening now, caused mainly by human activities

Weighted percent

NCERA
NCERA
NCERA

NH Democrat — 95% confidence interval
NH Independent — ▲ US NCERA
NH Republican

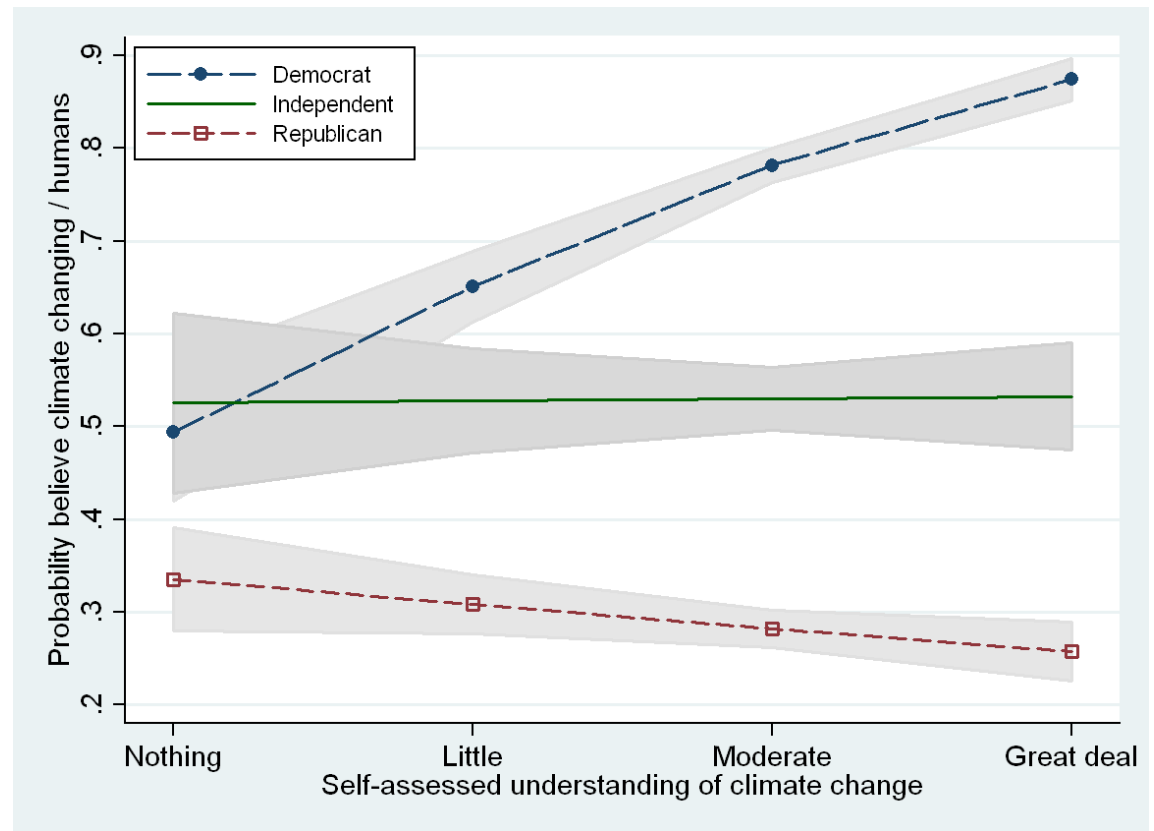Jul2010   Jan2011   Jul2011   Jan2012   Jul2012   Jan2013

Democrats and Republicans are widely divided. Independents have in-between, more volatile views — responding partly to weather.

Temperature x *party* interaction effect in logit regression model

Among Democrats, belief in anthropogenic climate change increases with self-assessed understanding. Among Republicans, belief *declines* with self-assessed understanding.

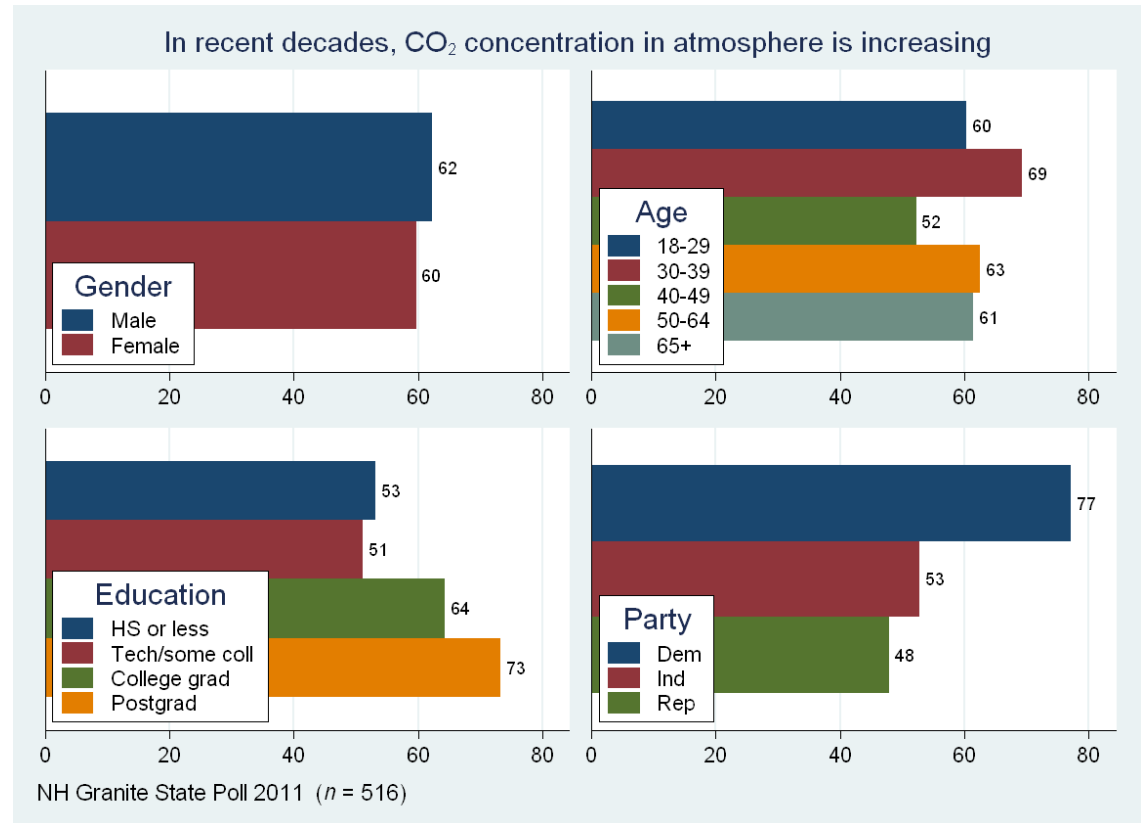*Understanding* x *party* interaction effect in logit regression model

Through *biased assimilation*, people selectively acquire information that fits their pre-existing beliefs.

"Which of the following three statements do you think is more accurate? Scientific measurements have confirmed that in recent decades, the concentration of CO_2 or carbon dioxide in the Earth's atmosphere is ...

* Decreasing
* Staying about the same
* Increasing"

In recent decades, CO_2 concentration in atmosphere is increasing

Gender
- Male
- Female: 62, 60

Age
- 18-29: 60
- 30-39: 69
- 40-49: 52
- 50-64: 63
- 65+: 61

Education
- HS or less: 53
- Tech/some coll: 51
- College grad: 64
- Postgrad: 73

Party
- Dem: 77
- Ind: 53
- Rep: 48

NH Granite State Poll 2011 (*n* = 516)

Recent paper and blog posts examine "the demographics of true and false climate facts."

"Which of the following two statements do you think is more accurate? Over the past few decades,
*   Human activities have released much more CO_2 than volcanoes.
*   Humans and volcanoes have released about the same amounts of CO_2.
*   Volcanoes have released much more CO_2 than humans."

Humans released more CO_2 than volcanoes in recent decades

Gender
Male — 41
Female — 37

Age
18-29 — 50
30-39 — 39
40-49 — 37
50-64 — 41
65+ — 35

Education
HS or less — 34
Tech/some coll — 38
College grad — 39
Postgrad — 44

Party
Dem — 52
Ind — 34
Rep — 27

NH Granite State Poll 2012–2013 (n = 1,700)

Why communicating about climate change is hard
(it's not just the nature of science)

- Among scientists, consensus on reality of ACC
- Among public, large minority rejects ACC
- Climate issues *more polarized* than social issues
- Unlike social issues, climate polarization *widens with education* and with *self-assessed understanding*
- Through *biased assimilation*, people acquire information that supports their prejudices
- People know where to find arguments they can use, starting with partisan news *and blogs*
- Scientific information confronts *mobilized, active opposition* in this environment
- *Recommendation: communicate with a detailed awareness of counter-argument "talking points"*

Questions?