

Commentaries conform to [JOE submission standards](#) and provide an opportunity for Extension professionals to exchange perspectives and ideas.

Embracing the Climate Change Skeptic

Abstract

Climate change is a controversial subject that is rife with skeptics. Educators and researchers should look at skeptics as sounding boards offering questions that we need to find the answers to. The technique described in this article is designed to bring skeptics into the conversation, and gain valuable insight into our practice.

Kim Dixon

Extension Educator
University of
Maryland Extension
Westminster,
Maryland
kdixon12@umd.edu

When I began working on climate change, I was excited. I wanted to stimulate change in the community for the betterment of our world. I spoke about this project with everyone. My first full day of research I met an educator's worst nightmare, a skeptic—a raging, doubtful person who declared my work a waste of time and blackened the eyes of everyone working with the subject. That was the first of many encounters with climate change doubters. According to the 6 America's study done by Yale and George Mason (Maibach, Roser-Renouf, & Leiserowitz, 2009), 49% of Americans are skeptical at some level. It is impossible to make progress mitigating or adapting to climate change without being able to work with skeptical people. To move forward, I developed a technique to include everyone into the bigger conversation, easing pain, reducing stress, and letting everyone be heard.

Skepticism is important in science. Skeptical people help drive science to be more concrete and highlight where more research needs to be done. Skeptics are asking the questions that we, as researchers and educators, need to find answers to.

Extension agents need to be able to guide skeptical citizens towards a productive dialog regarding climate change (Morris, Megalos, Vuola, Adams, & Monroe, 2014). We can achieve this by stepping back and not rushing forward with an argument that skeptics are prepared for. We must be willing to listen to what everyone has to say. This is not to say that every person who is skeptical will be willing to engage in dialog, but if we try, the potential for our own improved understanding, learning, and gain is great.

Coming to a Common Ground with Skeptics

When engaging a skeptical person, understand the following. 1) Data for climate change is growing every day, but it is still small. 2) Every model is wrong; they only serve to guide (Wake, 2014). If these points are being used as a basis for not accepting that climate change is taking place, then you have to agree and point out that the data points are growing and are becoming more cohesive and that the models, while they may be wrong, have points that will come to fruition. When we agree with skeptics, it opens the door to dialogue.

Skeptics observe the same changes that we do, but they often have a different reason for why they happen. It is important to remember that not everyone has the same information regarding climate. Misinformation and misunderstanding can lead to skepticism. Rather than arguing over the science, start by discussing the commonalities. These can be, "I have observed..." statements, such as, "I don't remember having so many rainstorms that cause flooding. The storms seem more frequent and intense. Have you noticed this too?" This opens the door to dialogue without causing a reactive response. It invites them to share their story. This is beneficial both to finding a common ground and for starting a deeper, broader conversation about what is happening.

When inviting these conversations, avoid alarmism (James, Estick, & Bryant, 2014) and overly used analogies for climate change. Your skeptic is probably prepared to squash any thoughts that you might present that surround polar bears, sea level rise, global warming, or floods and drought. Skeptics are generally open to waxing nostalgic and are less likely to be on the defensive.

Raising a Concern with Skeptics

Once you have your skeptics feeling nostalgic, invite them to deepen the conversation by asking "Why do you think things are different now?" Now it is time for you to LISTEN! Do not correct, do not engage in debate, and do not interject your ideas, thoughts, feelings, or science. Actively listen, repeat things back as interesting points come up, and try to remember the key points.

When they finish talking, share your concerns about these changes and your reasoning. Avoid the hot topic, overly used analogies. This is where remembering key points from their conversation will be critical. If you can tie into what the skeptic cares about, you are more likely to continue a meaningful conversation.

Table 1.
Examples of Concerns You Can Use to Guide Skeptics in Meaningful Conversations
About Climate Change

Area of Concern	Examples of Concerns
Public Health	"I'm concerned with all of this extra rain, we are going to have more mosquitos and more disease." "I'm concerned that if our climate would become more temperate, diseases that are seasonal may be around year round."

	"I'm concerned that our food sources are going to become scarce."
Fiscal	"I'm concerned that our current infrastructure cannot support the increased rain/snow. I don't think our community can afford to change it." "I'm concerned that crop production is going to change, and it will affect the cost of food for my family." "I'm concerned that there will be more taxes and fees to help offset costs caused by some of these changes."
National Security	"I'm concerned that our country's finances will be impacted by changing crops and water shortages." "I'm concerned that the entire country will be put under water restrictions and water rights will be an issue." "I'm concerned that weather patterns are going to change, resulting in more violent storms that will displace citizens." "I'm concerned with the growing population and the changes in growing seasons/zones we will not be able to feed everyone."
Harvests/Crops	"I'm concerned that farmers are going to have to change their livelihoods because of the changes that we are seeing." "I'm concerned that our forests are changing because of the changes we are seeing." "I'm concerned that we are getting a lot more non-native, invasive species that will compete for our natives, and our crops."

Do they offer concerns of their own? Do they agree with your concerns? If they do not think your concerns are valid, why? Remember to actively listen. If they have observed changes, it is a logical progression to have concern, because if changes continue, lifestyles will have to change.

So What Can We Do? Guiding the Skeptic Toward Innovation

You have lead the skeptic on a journey through making their own observations to hearing and voicing concerns. You and the skeptic have a common problem and can now work on a solution together. Keep in mind that this solution may not be one that the individual can obtain on his or her own; it might be an innovative solution that would have to be enacted by a government entity or larger organization. However, it is a start to making a change in the individual's thinking regarding climate change. The innovative solution could be something that would mitigate the observed changes or it could be an adaptation to live with the observed changes. There are no wrong or right answers, and the thought process should be rewarded regardless. If the person does not have an idea on what can be done, you can encourage him or her to attend community meetings and town halls and have an active part in becoming the solution.

Provide an avenue for the skeptics to continue their journey. Introduce them to sources for research

and action. Direct them to someone who might be able to help them to find a solution. If they have a solution, encourage them to act.

Reflect, Learn, Apply, Repeat

Skeptics are a critical element in our ability to educate others. They are the ones who dare to disagree. They are the ones who work hard to find evidence to refute our work. Skeptics, when listened to, can enrich our teaching experience.

Reflect on what you heard. What did they say? Did they confuse weather with climate? Did they cite data that was manipulated? Did they say something that has been proven scientifically inaccurate? Did you hear semantics being argued? How can you, as an educator, help with these factors?

As educators we must review our presentations through the eyes of the skeptic. When a skeptic speaks, we should listen. In these moments we need to collect our thoughts, research, and reformulate our presentations. We need to make sure we make connections to real world science, allow and embrace missteps and miscalculations, and maintain a consistent vocabulary (Ana Villar, 2011). When we are prepared to work with everyone, including skeptics, we are creating an innovative think tank that is prepared for the future.

References

Ana Villar, J. K. (2011). Global warming vs. climate change, taxes vs. prices: Does word choice matter? *Climate Change*, 1-12.

James, A. A., Estick, N. M., & Bryant, A. (2014). Climate change impacts on agriculture and their effective communication by Extension agents (Discussion Forum). *Journal of Extension* [On-line], 52(1) Article 1COM2. Available at: <http://www.joe.org/joe/2014february/comm2.php#discussion>

Maibach, E., Roser-Renouf, C., & Leiserowitz, A. (2009). *Global warming's 6 Americas 2009: An audience segmentation analysis*. Fairfax, VA: George Mason University.

Morris, H. L., Megalos, M. A., Vuola, A., Adams, D. C., & Monroe, M. (2014). Cooperative Extension and climate change: Successful program delivery. *Journal of Extension* [On-line], 52(2) Article 2COM3. Available at: <http://www.joe.org/joe/2014april/comm3.php>

Wake, C. (2014). North East climate assessment. Paper presented at The Antioch College Climate Change Preparedness Conference: Climate Change and Resilient Communities. Manchester, NH. May 18, 2014. Retrieved from: <http://www.antiochne.edu/innovation/climate-change-preparedness>

The Discussion Forum for this Commentary can be found at:

<http://joe.org/joe/2015february/comm1.php#discussion>

Copyright © by *Extension Journal, Inc.* ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the Journal Editorial Office, joe-ed@joe.org.

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)