February 2, 2020

This is a collection of lesson ideas and activities to teach climate change compiled by Dr. Louise Comeau from various sources on Twitter.

1. Classroom discussion guides centered around the America Adapts Podcast. From Kate Bishop Williams @kbishopwilliams
https://www.americaadapts.org/podcastsintheclassroom

2. Climate change and policy. Part of the class is a tragedy of the commons exercise where they do the energy policy simulator to later design a policy solution. DM for a lesson plan. Anthony Piscitelli @AnthonyPiscitel
https://energyinnovation.org/what-we-do/energy-policy-solutions/

3. I have turned this paper on collective social risk into a game (basically repeat the experiment in class) that helps students see how even modest changes in perceived level of risk affect social decisions. Students like it and it opens good discussions. From Bryan Shuman @WyClimate
https://www.pnas.org/content/105/7/2291.short

4. Designing their own adaptation wedges to come up with a combination of options to reduce emissions. From Deepti Singh @ClimateChirper
https://cmi.princeton.edu/wedges

5. The most resonant with my students is to have a conversation w/ friends or family facilitated by the ClimateConversations app by @JudyTwedt @michtigch et al. The questions are non-political, designed to get participants to learn more about each other and find common ground in a non-judgmental space. Every quarter I LOVE reading the essays that students write about their conversation. From Dargan Frierson @DarganF
https://earthgames.org/interactive-stories/climate-conversations/

6. Students can play this game until they win. From Kevin Bell @MrKBellteacher
http://www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/

7. Using sustainable living techniques for engagement during lectures. From Aarne Granlund @AarneGranlund
https://www.sitra.fi/en/projects/100-smart-ways-to-live-sustainably/

8. Katherine Hayhoe's twitter feed. Climate science, impacts, communication, policy and solutions. Creative activities and assignments.
https://twitter.com/KHayhoe/status/1145766245364637706

9. Assign an endangered (due to climate change) habitat or critter. They research conversation/mitigation options & build an advocacy campaign for how to save them. Is it through local action? National law? International agreement? Is it about livelihoods? Ecosystem service? What is the communication strategy? Opposition? Have them learn about campaign models (e.g. @MidwestAcad), how lobbying works, roles of orgs like

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@aaas vs @UCSUSA vs @SierraClub, etc. What has worked before? And not? What leads to change? From Katie Matthews @katie_at_sea

10. Personal temperature monitoring to build context for climate justice and community decisions. This activity works in introductory courses for non-science majors. It is a good fit for geoscience, environmental science, social and environmental justice, sustainability, and other courses that seek to highlight how human outcomes are improved by joining science and human understanding. From Sarah Fortner @erthsarah
https://serc.carleton.edu/NAGTWorkshops/servicelearning/activities/218663.html

11. Take some legitimate and some shady websites to help students work out for themselves legitimacy/practice digital literacy/identify fake news. Each group has a different site and can use this infographic:
https://www.ifla.org/publications/node/11174

12. Create a climate campaign that includes a few components (billboards, TV spots, educational campaigns, editorials) targeted toward a specific audience (they are assigned a region and use the #SixAmericas data @YaleClimateComm). From Dr. Rebecca Barnes @waterbarnes
More info here: http://sites.coloradocollege.edu/rebeccabarnes/2018/01/19/adventures-in-interdisciplinary-teaching/

13. Course syllabus: From Sarah Fortner @erthsarah
https://serc.carleton.edu/NAGTWorkshops/servicelearning/courses/127425.html

14. Have students read/talk/discuss community empowerment models & strategies for building local literacy & climate decision making. Bring in models lead by diverse groups. Build those strategies into assessment. Also, I had students review tools in the Climate Resilience Toolkit & match tools with decision makers and describe the spatial scale that guides decisions and what was confusing. It was a great way to learn how much "easy" tools need translation. From Sarah Fortner @erthsarah
https://toolkit.climate.gov

15. Compare a section of the IPCC report with the Summary for Policymakers. How is the science translated for policy makers? What gets diluted/left out in the consensus (SPM) version? What messages get picked up by the press? Students can explore details of 70 sample modeled Earths with ancient, future and alien conditions. I ask them to pick one and explain it to the class. Dr. Sarah @FataMorgana_LS
http://www.buildyourownearth.com/