

Common Book Project Committee
Common Conversations 2018: Pandora's Lab
Options for Discussion Questions/Activities

Activities

Student Generated Questions

Divide students into groups or pairs and give each group a chapter to discuss and develop a broader discussion question. Students will write their questions on the board and then discuss them as a group. You most likely won't get through all 8, but they will have a starting point for discussion.

Video to Stimulate Discussion

The 'Fog Truck' video shows vivid images of a community spraying DDT everywhere to try and prevent children from getting infantile paralysis. *Show the video to the group.* It seems obvious now that this was a bad idea, but why would communities have chosen to take such actions many years ago? What do you think the trade-offs were in this decision?

Knox Feature Profile Test

Cut out and bring 8 sets of the paper version of the Knox Feature Profile Test (used in the early 20th century to determine if immigrants should be allowed into the United States; see Chapter 4) to the session. Divide students into 8 groups and give one set of materials to each. Ask them to complete the test. Some potential discussion questions include:

- Is the Feature Profile test a more fair IQ test than a test based on language?
- Why did early 1900's immigration officials want to test for "feeble-mindedness?"
- What are some reasons an immigrant might not have done well on the test? Is this test a scientifically valid way to assess someone's level of intelligence?

Simple Starter Questions

1. What chapter did you like the most/ least and why?
2. How much of this information did you know in advance or have heard of before?
3. Did any of the information surprise you, and why?

Using Scientific Findings

4. Did the science really go wrong? Or is the people's use of the science that went wrong?
5. The author argues that one of the reasons science has been misused is because of the lack of data, not reading the data, or misrepresenting the data. How can we be sure that we are given the correct information?
6. How does the importance of getting "science" right compare to getting "policy" (how society uses the scientific findings) right? Is one more important than the other?
7. To what extent is the promotion of untested or unsupported drugs, cures, theories etc. like fake news? Are there ways we can evaluate the claims we read about these?

Role of the Scientist

8. Many of the subjects in this book are ideas that started off well-intentioned but eventually went awry. How can one ensure their idea/creation is used only “for good?” How can one ensure their useful idea/creation is used only in moderation or within certain parameters (pesticides, trans fats, lobotomies, etc.)?
9. What responsibility do scientists have for making sure their ideas are used correctly, for good purposes rather than bad? What can scientists do to prevent others from misusing their inventions?
10. How does learning about scientific discoveries that were initially hailed as visionary turning out disastrous affect how you might approach your own learning or research projects and/or the research conducted at Clarkson? What role could a student researcher have in helping to prevent science gone wrong?

Focus on Specific Scientific Discoveries

11. Scientists are only now understanding the long term effects and consequences of chemical compounds on the human body, yet the author argues that maybe there may have been an overreaction to the chemical DDT. Do you agree with the author? Why or why not?
12. The author discusses the pitfalls of opium as the US is currently facing an opiate/opioid abuse epidemic. What, if any, are the benefits of opioids and opiates? Are there safe uses for opioids? How can you determine if the benefit of opioids outweighs the cost?
13. Did you try taking part of the Stanford-Binet (IQ) test? (There’s a link in the chapter 4 section of the conversation guide). What are your thoughts on what it is supposed to reflect? Do you think it is a fair assessment on its own of intelligence?

Learning from the Past/Looking to the Future

14. The author lists 7 ways we should learn from the past. Can you think of any other ways we can learn from these examples of “science gone wrong”?
15. In chapter 8, *Learning from the Past*, the author offers seven different lessons learned from “science’s dark past”. Are there current instances of science, invention, or policy that you think could benefit from one of these lessons? Is there a way for us to avoid history repeating itself?
16. Which recent scientific discoveries do you think have the potential to be included in an updated version of *Pandora’s Lab* 20 years from now?

- **Do you have a suggestion of a book or topic that you think would be a good focus for next year’s Common Conversation?**