

Agriculture and resource economics

with Dr Nathan Fiala

Talking points

KNOWLEDGE

1. How many people in the US are living in extreme poverty?
2. How little does someone have to earn to be considered to be living in extreme poverty?

COMPREHENSION

3. How can living in poverty affect a person's physical and mental health?
4. Why does extreme poverty tend to be more prevalent in rural communities?

APPLICATION

5. How will a randomised control trial allow Nathan to test whether his intervention has helped people find jobs?
6. What questions might Nathan ask participants in the study to see whether the intervention has been successful?

ANALYSIS

7. How has a lack of quality education contributed to extreme poverty in rural New England?
8. Nathan hopes his intervention will help young people at the start of their careers, as well as older people who are struggling to find work. What changes might he have to make to his intervention when working with each of these groups to ensure that it is appropriate for them?

Synthesis

9. Imagine that you have implemented a new intervention that aims to help single parents save money by providing them with free childcare. How would you design a study to determine whether the intervention has had the desired effects?

Evaluation

10. How effective do you think Nathan's intervention will be for both high school students and unemployed people, and why?
11. Can you see any challenges or barriers that might prevent Nathan's intervention being effective? How could these be overcome?

Activities

1. A local intervention

Think about your local community and the social issues that exist within it. Is there a high level of wealth inequality? Are there problems with anti-social behaviour or vandalism? Are people struggling to pay their bills or having to use foodbanks? Are there problems in your local schools? Wherever you live, the chances are that your community has its own unique set of issues.

Once you have thought about a social issue in your local area, think about how you could design an intervention to help solve the issue.

Consider:

- Who is this issue affecting? What are they lacking? What responsibilities do they have? What support do they need?
- What are the causes of the issue? Are the causes financial, cultural or educational? Is the issue caused by a deeper problem?
- What support is available already? Is the support working? If not, why not?

Create a presentation and use it to pitch your idea to the class. Give some background on your local area, explain what the issue is and what its causes are, describe your intervention and how you will implement it. Explain why you think it will help and how you will evaluate whether it is working.

Allow your classmates a chance to ask questions about your intervention, and use these discussions to help you improve your design.

2. Other areas

Much of Nathan's research focuses on solving social issues and helping communities grow and develop. However, agriculture and resource economics covers a wide range of topics including farming, energy production, mining, water management, forestry and fisheries.

Think about your local area. Whether you live in a small village in the countryside or a large city, there are likely to be lots of opportunities for an agriculture and resource economist. Try to identify the different ways in which an agriculture and resource economist would be able to help your local area. This could be anything from developing sources of renewable energy and helping to reduce water waste to helping farmers sell their produce and conserving nature and wildlife.

If any of these things pique your interest, do some further research into them, and think in more detail about how they could be implemented in your local area.

More resources

- Explore more of Nathan's research on his website: nathanfiala.com
- Read one of Nathan's articles that was published in Scientific American: www.scientificamerican.com/article/the-greenhouse-hamburger
- Nathan has co-authored a book, *Measuring Success of Youth Livelihood Interventions*: nathanfiala.com/2014/gpye-m&e-report.pdf
- Nathan highlights a study he conducted in Uganda which showed the benefits of giving cash grants to people in poverty. Learn more about this idea through the charity GiveDirectly: www.givedirectly.org/about