Motivation

- Becker (2003) → make economics the sexy social science
- Hoyt (2003) → make economics the fulfilling social science through hooks showing the applicability of the concepts
- > 50% of class time is allocated to traditional lectures and chalkboard work (Watts & Schaur, 2011)
- ↑ in teaching techniques and classroom technology (Hoyt & McGoldrick, 2019; Picault, 2019)
- Wooten et al. (2020) → make economics more relevant through current events and relatable examples
- > media (TV shows, movies, Broadway musicals, music, podcasts)
- * Literature: there is more research on the usage of TV shows and films in economics courses relative to podcasts or TED talks

Why Podcasts?

- * Readings + podcasts + videos → offer learning opportunities for various learners (Moyal & Jiang, 2013)
- * Assigned prior to class + video clips shown in class
- * Advantage: podcasts can be listened while walking, driving, or exercising

Why Team-Based Learning (TBL)?

TBL is a student-centered teaching strategy that harnesses the power of peer learning through permanent teams (Michaelsen & Swow, 2004) → relevant and complex team application exercises

1. Significance of the subject
   - multiple defensible choices (no obvious solution)
2. Specific choice
3. Same problem
4. Simultaneous reporting (flashcards, Kahoots, Sorciative)

Objectives

To show how NPR Planet Money podcasts and TED talks can be employed to engage students and provide real-world applications in a Team-Based Learning (TBL) setting for 2 courses:

- Principles of Microeconomics
- Environmental Economics

- Podcasts & TED talks
- TBL Application Exercises

Students will:
- ↑ Student Engagement
- ↑ relevance of economics

Examples of TBL AE based on Podcasts/TED talks:

Microeconomics

- Example 1: Special Guest for Economists by NPR Planet Money
  - Which assumption of the competitive market is least likely to hold in a labor market?
    - A) Homogeneous pool/service
    - B) Perfect information
    - C) Free entry and free exit
    - D) Many buyers and many sellers → price takers

- Example 2: Podcast by NPR Planet Money
  - What is the main reason why oil prices are dropping so dramatically?
    - A) decrease in demand due to covid-19
    - B) increase in supply due to OPEC's inability to act like a monopoly
    - C) increase in supply due to fracking

Environmental Economics

- Example 3: The One Climate Solution by Ted Halstead
  - TED Talk and The One-Page Plan to Fix Global Warming... Revisited by NPR Planet Money
  - What is the best policy to decrease GHG emissions from vehicles in cities?
    - A) Carbon tax
    - B) License plate ban
    - C) Toll system
    - D) Improved public transportation system

- Example 4: The Value of Nature by Pavan Sukhdev
  - TED Talk
  - What is the best strategy to GHG emissions globally and therefore diminish climate change?
    - A) To establish carbon taxes worldwide.
    - B) To follow an international agreement in which all countries adopt the same emission standards.
    - C) To follow an international agreement with a pollution trading system.
    - D) To establish closer domestic greenhouse gas emission standards and commit to carbon neutrality, at a minimum.

- Example 5: The Value of Nature with TED talk
  - What is the value of nature?
    - A) Carbon negative
    - B) Negligible
    - C) To follow an international agreement
    - D) To establish carbon neutrality as a goal (carbon negative)

- Example 6: TED talk: TED Radio Hour: It's Carbon Negative
  - TED talk by Theron Tobgay
  - What is the best way to estimate the value of Yasuní National Park?
    - A) The value is best estimated by the potential earnings from drilling oil in the area
    - B) The value is best estimated by the travel cost method
    - C) The value is best estimated by a contingent valuation method
    - D) The value is best estimated by hedonic pricing method

End-of-course Anonymous Course Evaluations

- Student Feedback

- The teacher demonstrated the importance and significance of the subject

- The teacher related course material to real life situations

- Comments:

  - * “Listening to podcasts about current events which include economic activity and following with a discussion made the class much more interesting. Allowing for discussion makes the course much more applicable than solely relying on the textbook.”
  - * “Her podcasts related every subject we were learning in a fun, creative way that I feel we benefited from.”
  - * “She really takes a creative approach to what could be a very dull subject, but she is really passionate about what she teaches and the use of podcasts relates what we’re learning to the real world.”

Conclusions

- • Podcasts & TED talks + TBL application exercises = ↑ student engagement and promote learning through rich discussions (as multiple answers are defensible)
- • Podcasts and TED talks ↑ relevance of economics by showing its applicability to real world situations and its significance
- • Students have responded positively to the usage of podcasts and TED talks.

Resources

- Instructors interested in using podcasts and/or TBL application exercises have these two resources available:
  - Econ Podcasts Website: https://serc.carleton.edu/econ/tbl
  - Library of TBL Application Exercises: https://serc.carleton.edu/econ/tbl

References