

Clickers

Arizona State University Department of Economics Teaching Faculty
Seminar

Why Clickers?

- Survey results – ECN 211 Spring 2015
 - Student like using clickers because of the immediacy of the feedback and the interaction
 - Students believe that using clickers enhances their learning
 - Students prefer polleverywhere over ASU clickers because it is free
 - Students identify paying for clickers as a financial burden
- Study findings (Ruediger, 2014)
 - Exam scores increase by up to 5% when clickers are used

Systems reviewed in this presentation

- Turning Point (ASU system)
- polleverywhere
- iClicker

- My personal experience/use of the systems
 - Turning Point: Fall 2009 – Spring 2013 at UW-Stevens Point
 - iClicker: Fall 2008 – Spring 2009 at UW-Parkside
 - polleverywhere: Spring 2015 at ASU

Turning Point (ASU System) - Basics

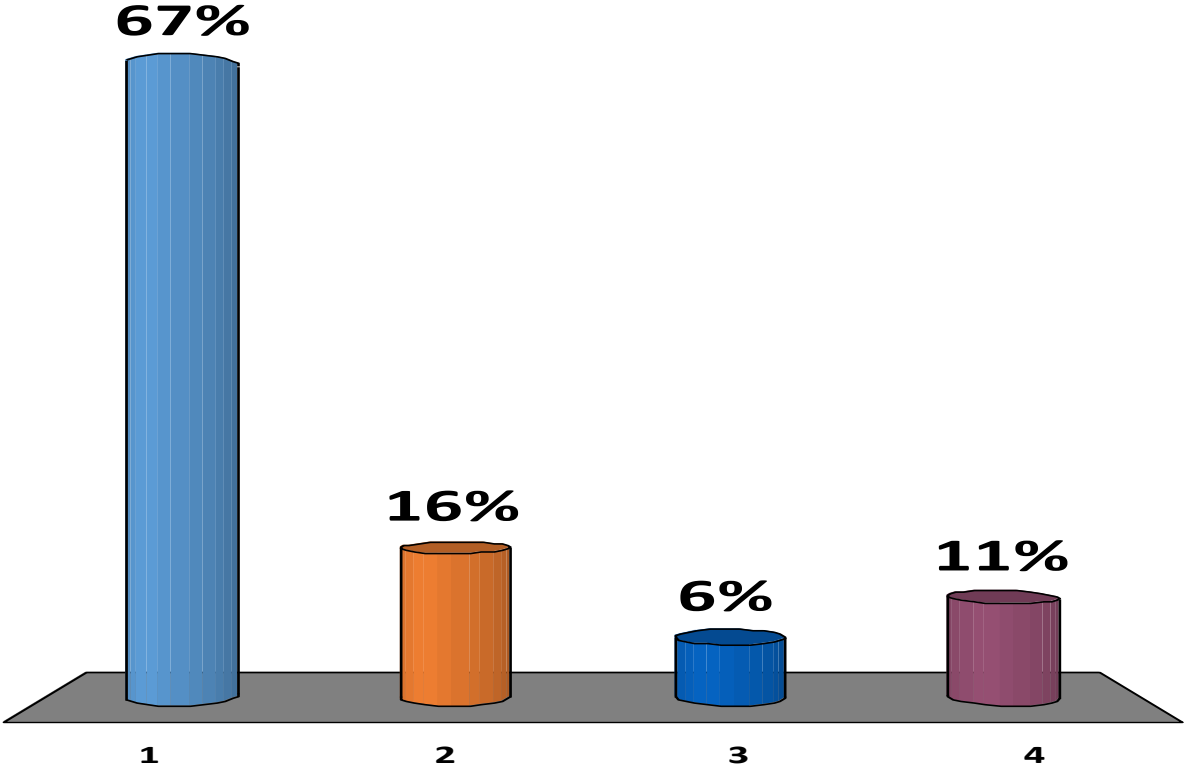
- Rooms – all of the WP Carey classrooms are equipped
<https://docs.google.com/a/asu.edu/spreadsheets/d/19T6O1gt5akaEEQvjJKXfWJqP2FPftSCfHNeuR5B0eIE/edit#gid=0>
- Fully supported through ASU
- Has an online system (ResponseWare) which comes at extra cost

Turning Point (ASU System) - Prices

- Clickers are a one time purchase
 - \$28, \$32, \$38 depending on the type of clicker (keyboard)
- ResponseWare accounts
 - Response Ware is an online based response system (smartphones, tablets, laptops or desktops - Android™ and Apple® apps available too)
 - ResponseWare costs \$19.99 per year for the students (ASU is working on providing this for free as a cloud based system)

In the circular flow diagram which of the following events occurs in the resource market?

- 1. Ryan earns \$2 playing baseball
- 2. Ryan buys a burger at Marvin's
- 3. Ryan goes to watch Aaron play football
- 4. Ryan buys an airline ticket.



Turning Point Pros and Cons

- Pros

- Largest amount of variations and animations available
- Full integration into PPT
- Very convenient to assign point values for questions and to track responses

- Cons

- Students have to pay
- Highest set up cost of the three systems for each question
- Instability of the system (I lost a lot of data and had to spend extra hours)
- ResponseWare App has horrible reviews

iClicker - Basics

- External Receiver needed – plug in through USB
- Company provides you with a free receiver
- Student responses are saved with a picture of the question (PPT)
- Has an App based system available (REEF polling)

iClicker prices

- i>clicker + remote. \$30.99 NET price. A-E multiple choice functions only.
- i>clicker 2 remote. \$41.99 NET price. A-E, short answer, numeric, self-paced polling
- REEF: Polling. Tiered pricing starting at \$9.99 for 6 months (open classes). Cloud-based, web-enabled app for ios, android. All features as ic2 remote.

ACTIVE LEARNING 1

Points off the PPF – iClicker Example

Question A. Would it be possible for the economy to produce this combination of the two goods?

- A. Impossible but efficient
- B. Possible and efficient
- C. Impossible and inefficient
- D. Possible but not efficient

iClicker Pros and Cons

- Pros

- Easy to set up
- Crash proof

- Cons

- Students have to pay
- Instructor has to carry the receiver to each class

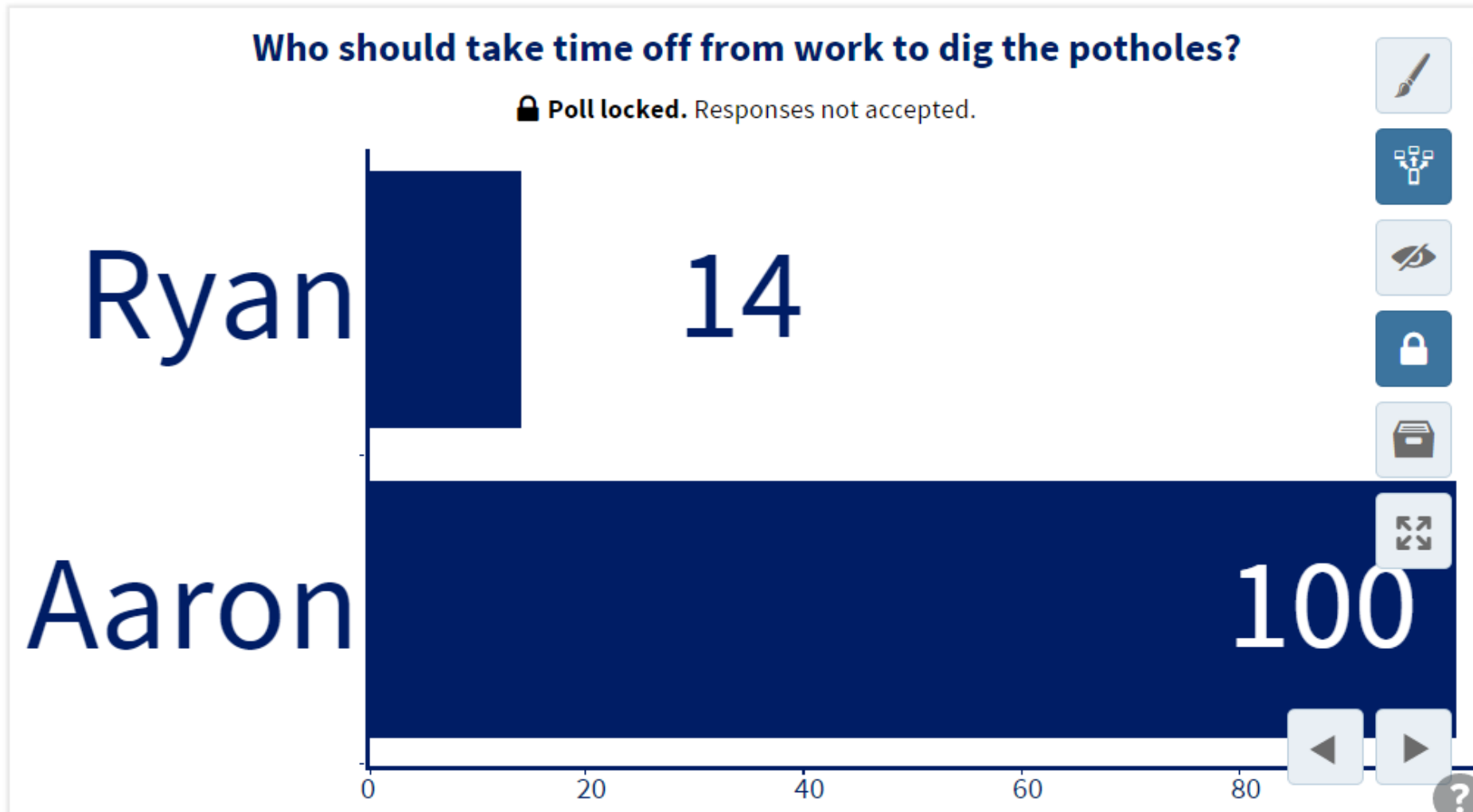
Polleverywhere - Basics

- Text message based polling system
- Questions can be written in word and imported into polleverywhere
- Can be fully integrated into PPT
 - Questions need to be created on polleverywhere webpage first
 - Need to download add-in for complete PPT integration (disappears from system if updated)

Polleverywhere prices




- \$14 per year per student
- \$349 per instructor for one semester.
- Web site states \$3000+ per year for institution

Polleverywhere Example





1. Configure 2. Test 3. Present

▼ How people can respond

-  **Website**
Audience can respond at PolleEv.com/stefanruedig964, as long as the poll is active. (?)
-  **Text messaging**
 - Presenter session:** Audience texts [STEFANRUEDIG964](#) to [22333](#) to join the session, then they text
 - Keywords:** Audience texts an auto-generated code for each response, without joining the session.
-  **Twitter** Link a Twitter account (?)

▶ Response settings

▶ Schedule lock/unlock times

 Edit Poll ...  Delete

Polleverywhere – Pros and Cons

- Pros

- Easy to use
- Possible to set up without cost to students
- Several ways an audience can respond to polls
- Open ended responses possible (can be moderated)


- Cons


- Have to navigate to webpage to create questions
- PollEv Presenter App for PPT integration is buggy

Favorite “Clicker” Applications

I don't understand _____

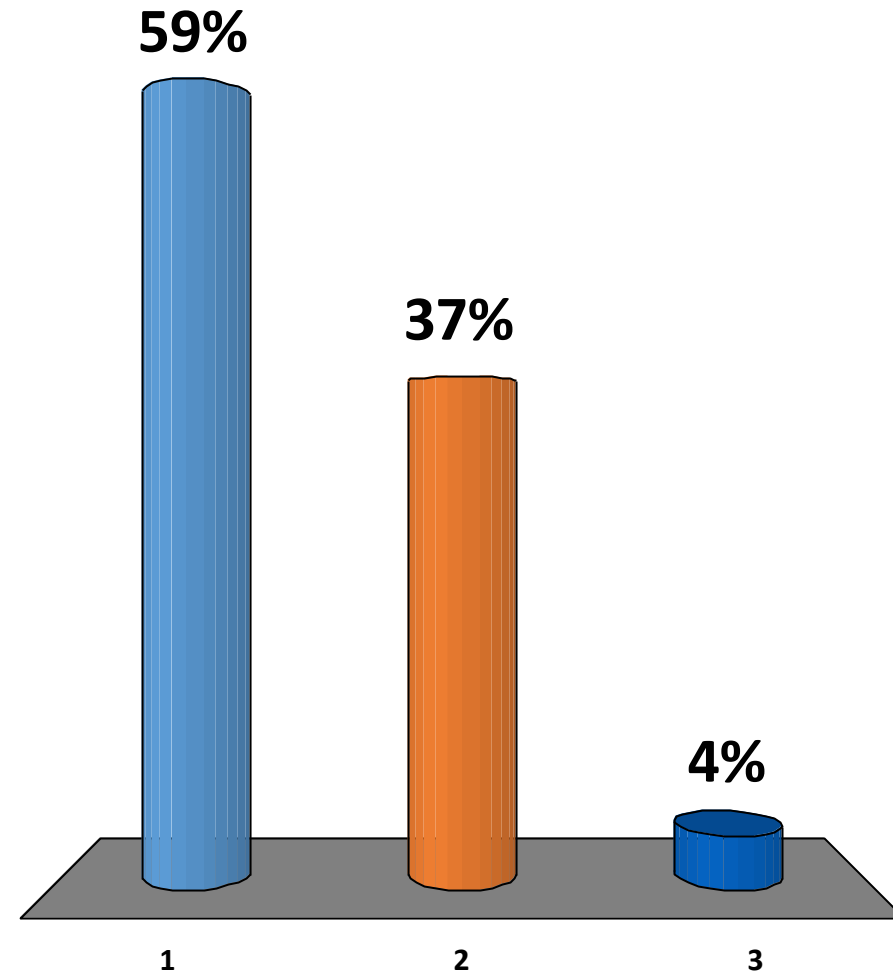
 Respond at Pollev.com/stefanruedig964

 Text **STEFANRUEDIG964** to **22333** once to join, then text your message

 No responses received yet. They will appear here...

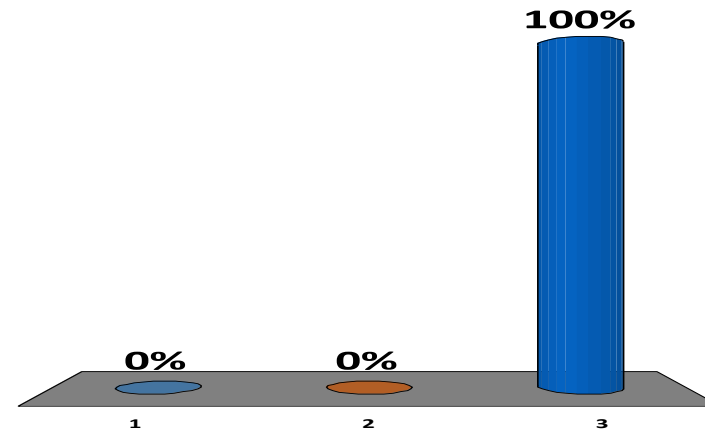
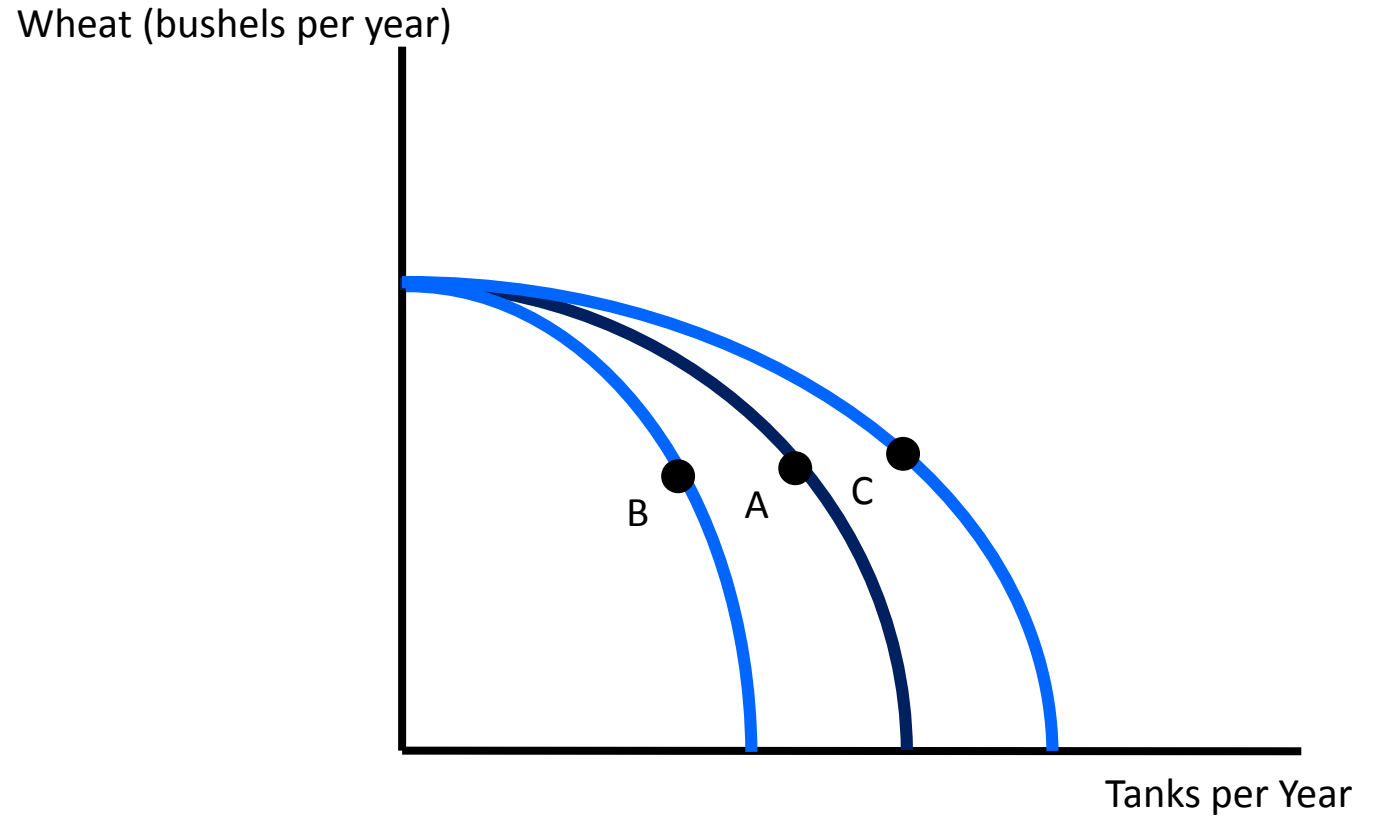
Does this make sense?

1. Yes
2. A little
3. WTF



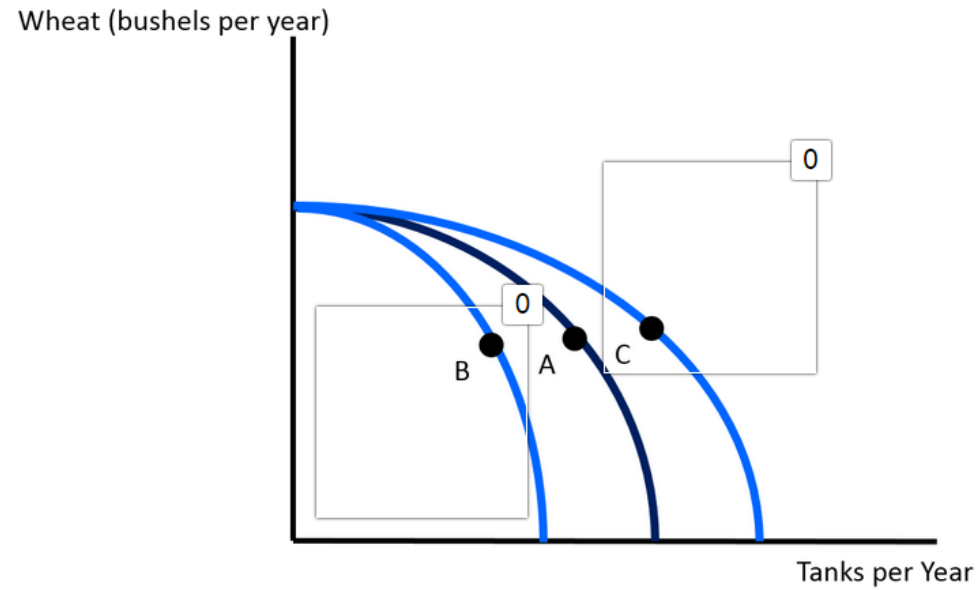
How could this economy move from point A on the old PPF to point C on the new PPF

1. Improvement in technology to produce wheat
2. This is impossible
3. Improvement in technology to produce tanks



Our economy is currently at point A. Which point would we move to if we experience an improvement in the technology to produce tanks?

Respond at [PollEv.com/stefanruedig964](https://www.pollEv.com/stefanruedig964)




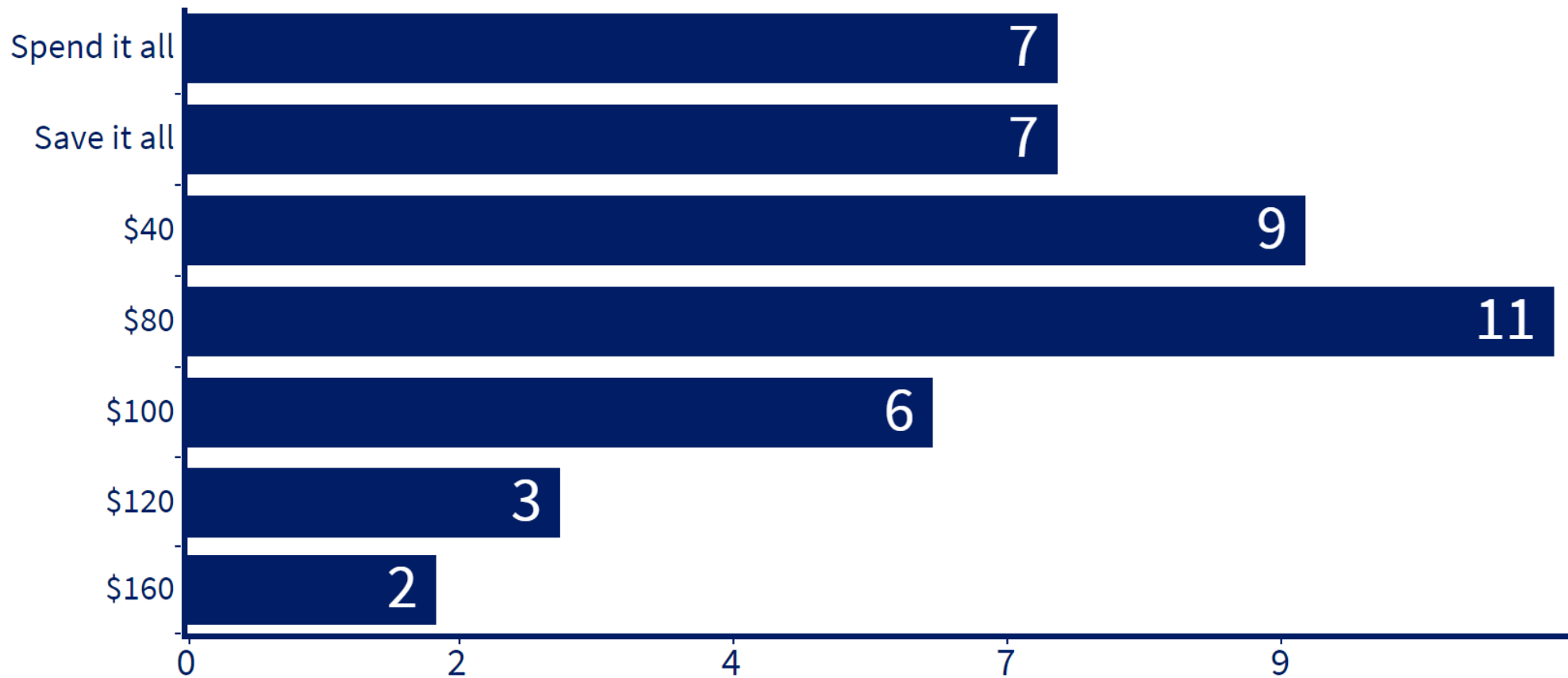
What would you do?

Suppose your paycheck goes up by \$200. Would you spend it all, save some of it or save all of it?

How much would you spend?

What would you do? Suppose your paycheck goes up by \$200. Would you spend it all, save some of it, or save all of it? How much would you spend?

 **Poll locked.** Responses not accepted.



You determine that you need tutoring for this class; you negotiate that you can use chicken wings as money for payment; using chicken wings as money is an example of

1. Fiat Money
2. **Commodity Money**

