

# **Facts and Discussion Based Learning using the CORE Textbook, and Development of Economic Literacy in Japan**

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Core econ

Search by  
Core econ



すべて

ニュース

動画

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画像

もっと見る

設定

ツール

約 386,000,000 件 (0.39 秒)

## Core-Econ

[www.core-econ.org/](http://www.core-econ.org/) ▼ このページを訳す

Most of my students are from rural Arkansas - \$150 for a single textbook is "real money" to them and the **CORE** text is superior to most texts in almost every respect." - Thad Jackson, Instructor of **Economics**, Arkansas State University. "A vast improvement over existing textbooks. **CORE** does not shy away from the complexity of the problems we face. The **CORE** materials are so good they make me want to teach introductory **economics** again." - Dani Rodrik, Ford Foundation Professor of ...

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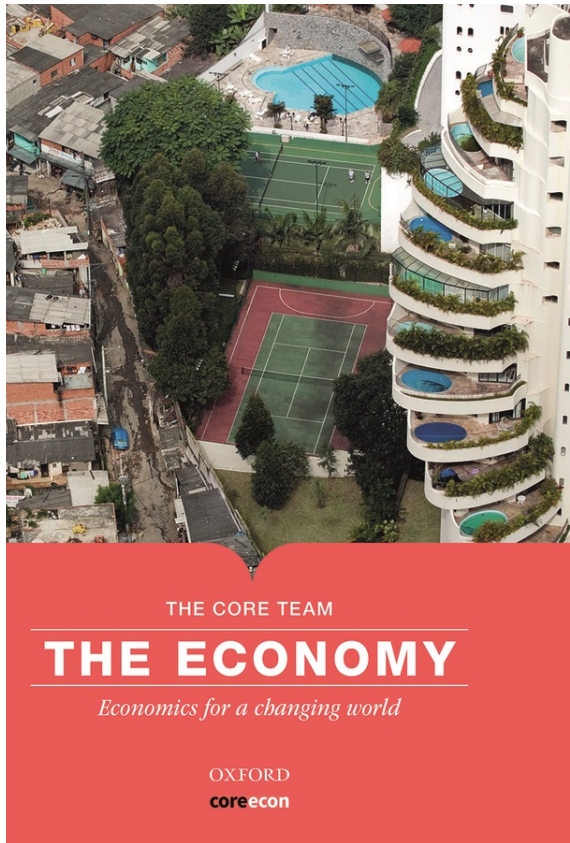
## Login

Login. Please login using your email and password. Home ...

## FAQs

Frequently asked questions. If you want to know what CORE offers ...

You will find  
the site!



## Introduction: What is the CORE textbook? (1)

„It all began less than five years ago after the global financial crisis amid student dissatisfaction with economics curricula. Students felt the traditional economic theories and models that they were being taught in class did not resonate with the economic realities surrounding them. Not only had there been a financial crisis and global recession, but also inequality was rising, and productivity growth had slumped.“

(Emphasis mine, „UCL's radical approach to economics teaching sparks a global trend“ UCL news, 2017. <https://www.ucl.ac.uk/news/2017/sep/ucls-radical-approach-economics-teaching-sparks-global-trend> accessed in Sep. 19, 2021.)

Comparison between *Principles of Economics* (Mankiw) and the CORE

Principles of  
**Economics**

Basic topics in economics  
like Market, enterprises,  
consumer behavior

Theoretical models oriented

Step by step exercises to  
understand models and  
concepts

Paper based (expensive)

**coreecon**

Economics for a changing world

+Including actual topics and  
historical issues like Inequality,  
financial crisis

+Including empirical data,  
facts, videos, or graphs

Exercises to understand basic  
concepts and empirical  
analysis

Online based(Free)

# Introduction: What is the CORE textbook? (3)

## **Research question**

- Is the CORE textbook effective to develop Economic Literacy in English for non-native students?
- What are the advantages and disadvantages of the CORE textbook in teaching students from the context of economic education in a Japanese university?

## **Focus & Methods**

- Educational practices by using the CORE textbook in a Japanese university
- Evaluating students' progress in Economic Literacy using tests (performing EL Tests in the beginning and the end of a course)

# Challenges: Teaching Economics in English for Japanese students (1)

- Offering a course on Introductory Political Economy (around 60 participants) /Introductory International Political Economy (around 20 participants) in Spring Semester 2021, by using the CORE textbook
- Most participants are 2<sup>nd</sup> year students of Faculty of Economics, Ritsumeikan University (high level private university in Japan)
- For most participants, it is the first experience to attend a course offered in English
- Most classes are basically offered online (via zoom) due to COVID-19 crisis



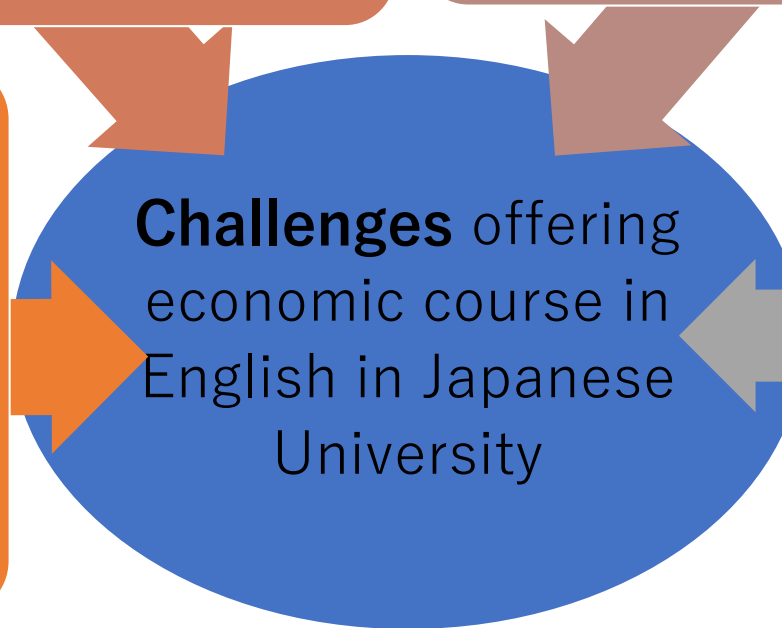
**Students' attitudes of being afraid of making a mistake too much** and inquire "one correct answer" (entrance exam competition mindset)

**Students' limited skills in critical analysis** due to their few experiences in discussing with others (or restraint by "sensing the mood" culture)

**Relatively lower English skills** and wider range of skills (average score of 60 in TOEFL)

**Challenges** offering economic course in English in Japanese University

**Difficulty to keep students' motivations and interests** in course contents including theoretical models



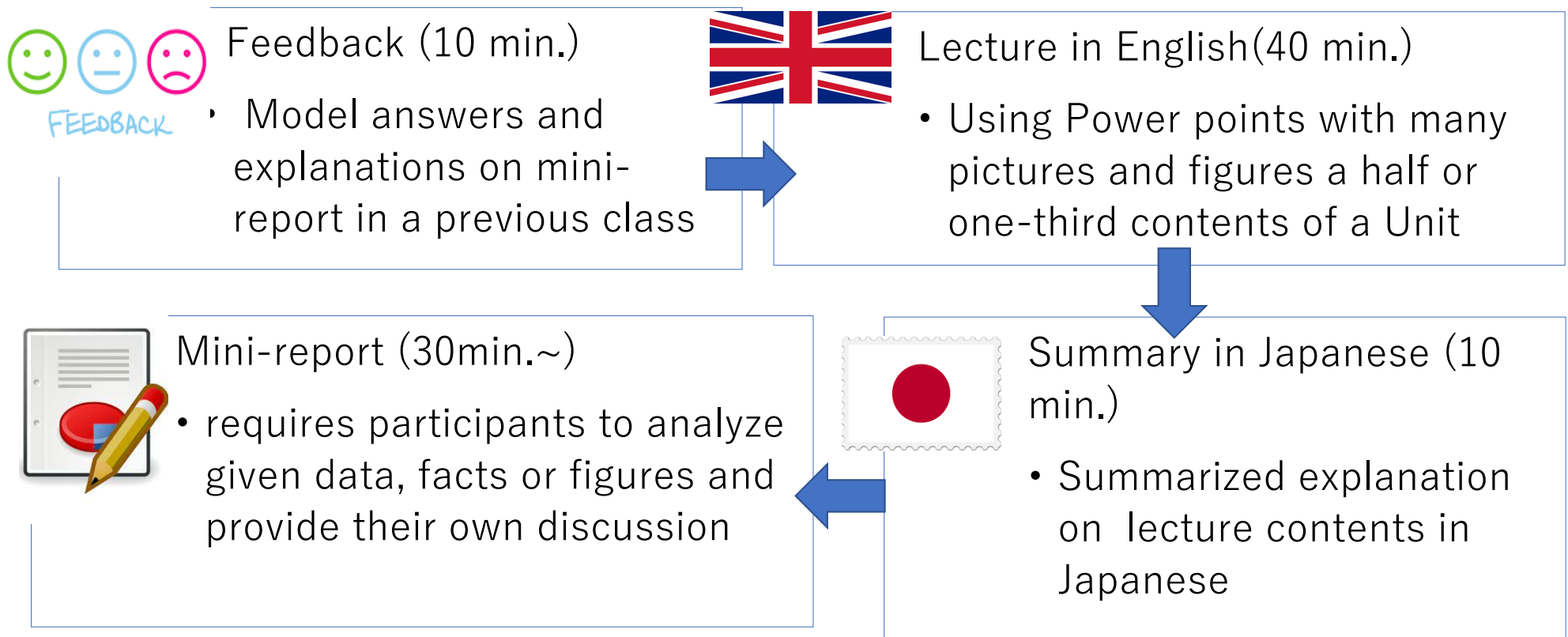


# Facts and Discussion Based Learning by the CORE textbook (1)

- Advantages of CORE textbook using introductory political economy for Japanese students
  1. Students with lower English skills can **keep their interests in the contents**, because of many figures, graphs, and pictures
  2. Students can understand model as “a tool” to understand an economic fact and **how to apply a model to actual data**
  3. Students can develop **discussion skills** based on critical analysis on facts or data
  4. Students can develop **economic literacy skills** by reading many English texts and writing in English (via mini-report). (The vocabulary usage in the CORE is much higher than in Mankiw's)

# Facts and Discussion Based Learning by the CORE textbook (3)

## Structure of the class



# Mini-report submission

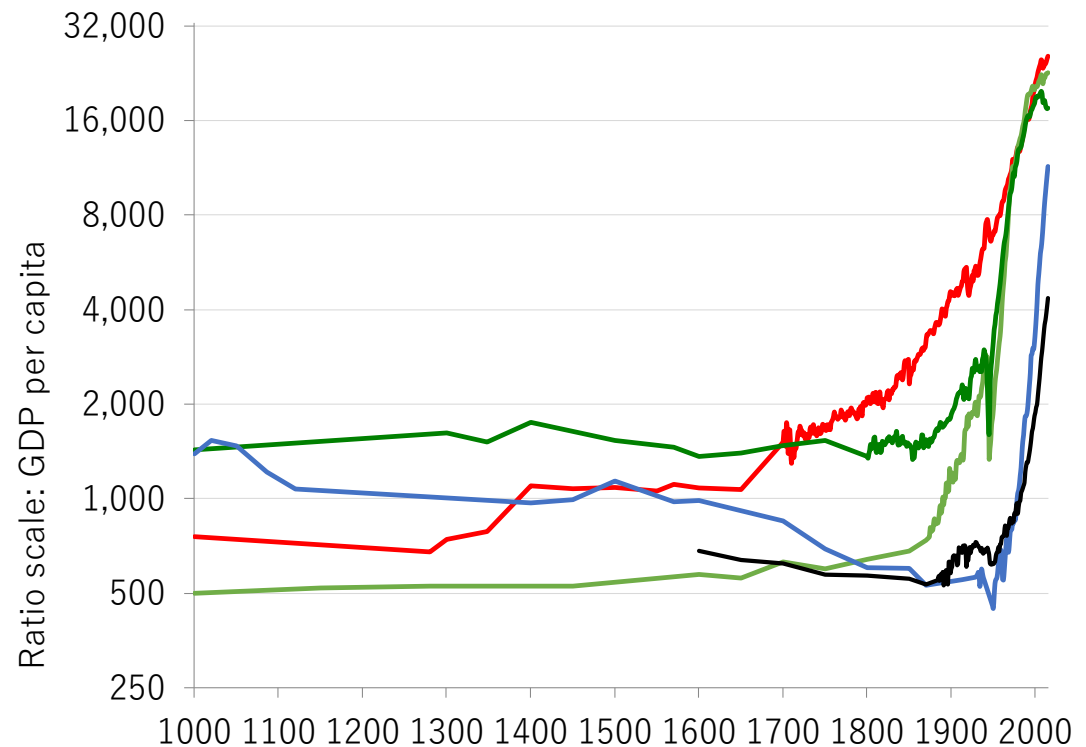


- **Students are required to submit a mini-report** within 24 hours after the end of each class via online ( Late submission is allowed, but with score deduction).
- Evaluation is based on mini-report submission
- Most of mini-reports require analyses of real data, facts or hypothetical situations and “discussion” on given questions, and writing their own opinions
- Some of the mini-reports require understanding theoretical models (eg. indifference curve, game theory)

## Example①: Hockey stick growth (UNIT 1)

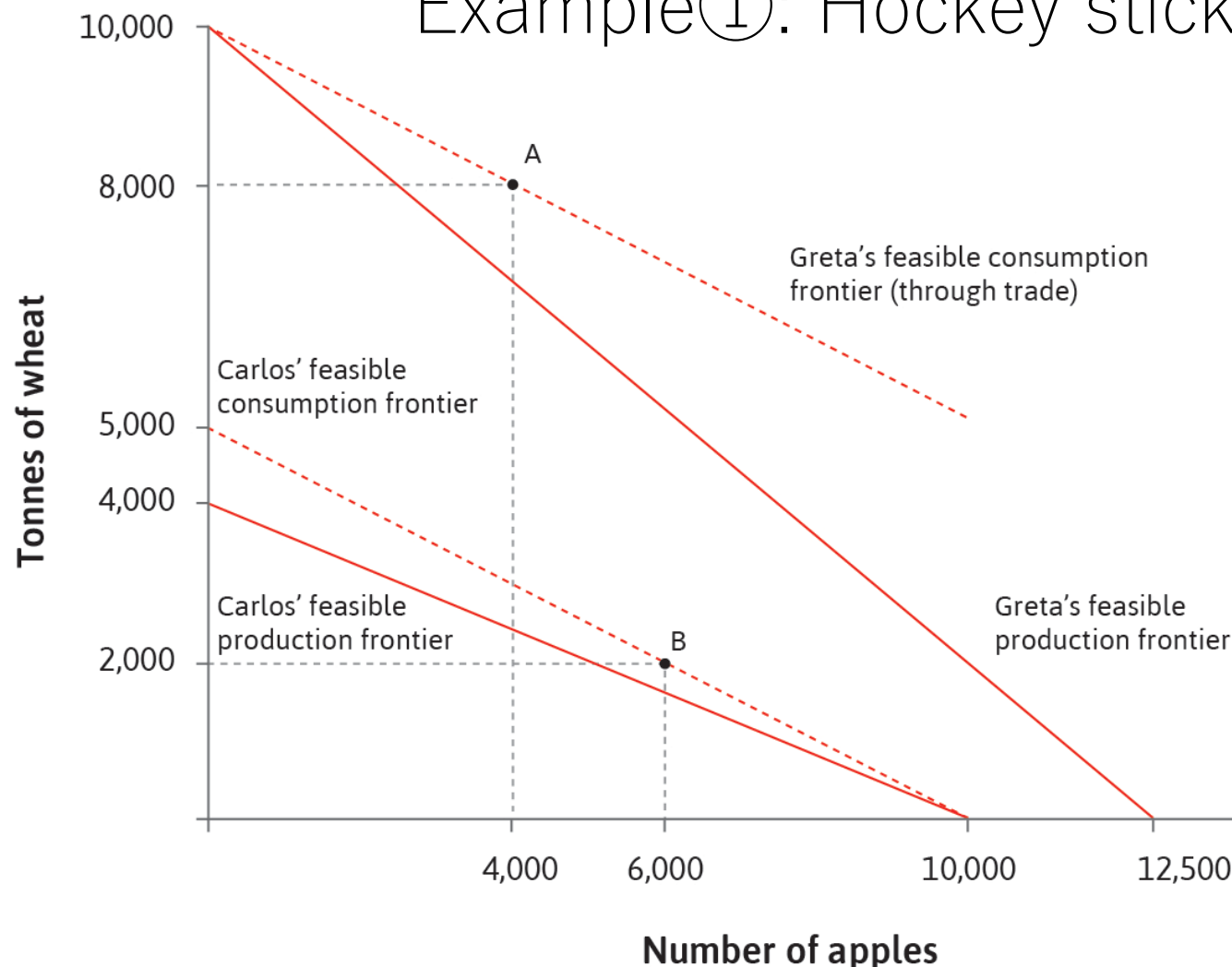
Eg The Figure shows changes in income (GDP per capita) from 1000 to 2000 in five countries.

1. Describe the differences among countries
2. Describe the changes over time.
3. Provide possible explanations for them referring to market, technology, private property and firms.



Coming topic: Feasible production frontier, roles of market, specialization and trades (comparative advantage)

## Example①: Hockey stick growth (UNIT 1)



Students can connect empirical facts (hockey stick growth after 19th century) with the idea of extended feasible production frontier by technical advance and specialization and trade among countries.



## Example②: Malthus' Model (UNIT 2)

- Key ideas:
  - Population expands if living standards increase
  - But the law of diminishing average product of labour implies that as more people work on the land, their income will inevitably fall
  - In equilibrium, living standards will be forced down to **subsistence level**.
  - Population and income will stay constant.



## Example②: Malthus's Model (UNIT 2)

Eg The graph below shows changes in real wage and population from 1260 to 2000 in Britain.

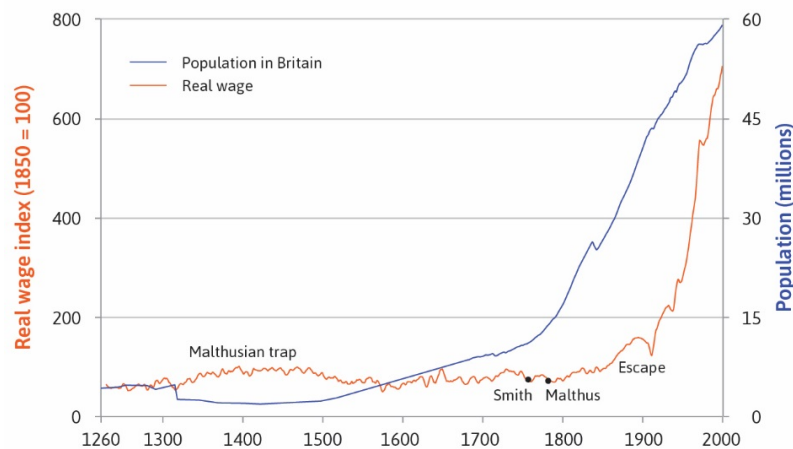
- Explain stagnation in real wage before 19th century (the period of “Malthusian trap” is indicated in the graph) by using Malthus' model.
- Discuss whether Malthus's model can be applied after 19<sup>th</sup> century.



## Example②: Exercise from UNIT 2

Eg The graph below shows changes in real wage and population from 1260 to 2000 in Britain.

- Explain stagnation in real wage before 19th century (the period of “Malthusian trap” is indicated in the graph) by using Malthus’ model.
- Discuss whether Malthus’s model can be applied after 19<sup>th</sup> century.



To address the questions, students are required ...

to understand a graph on real wage and population

to understand mechanisms of Malthus’ model (diminishing productivity of labor )

to apply Malthus’ model to analyze actual data

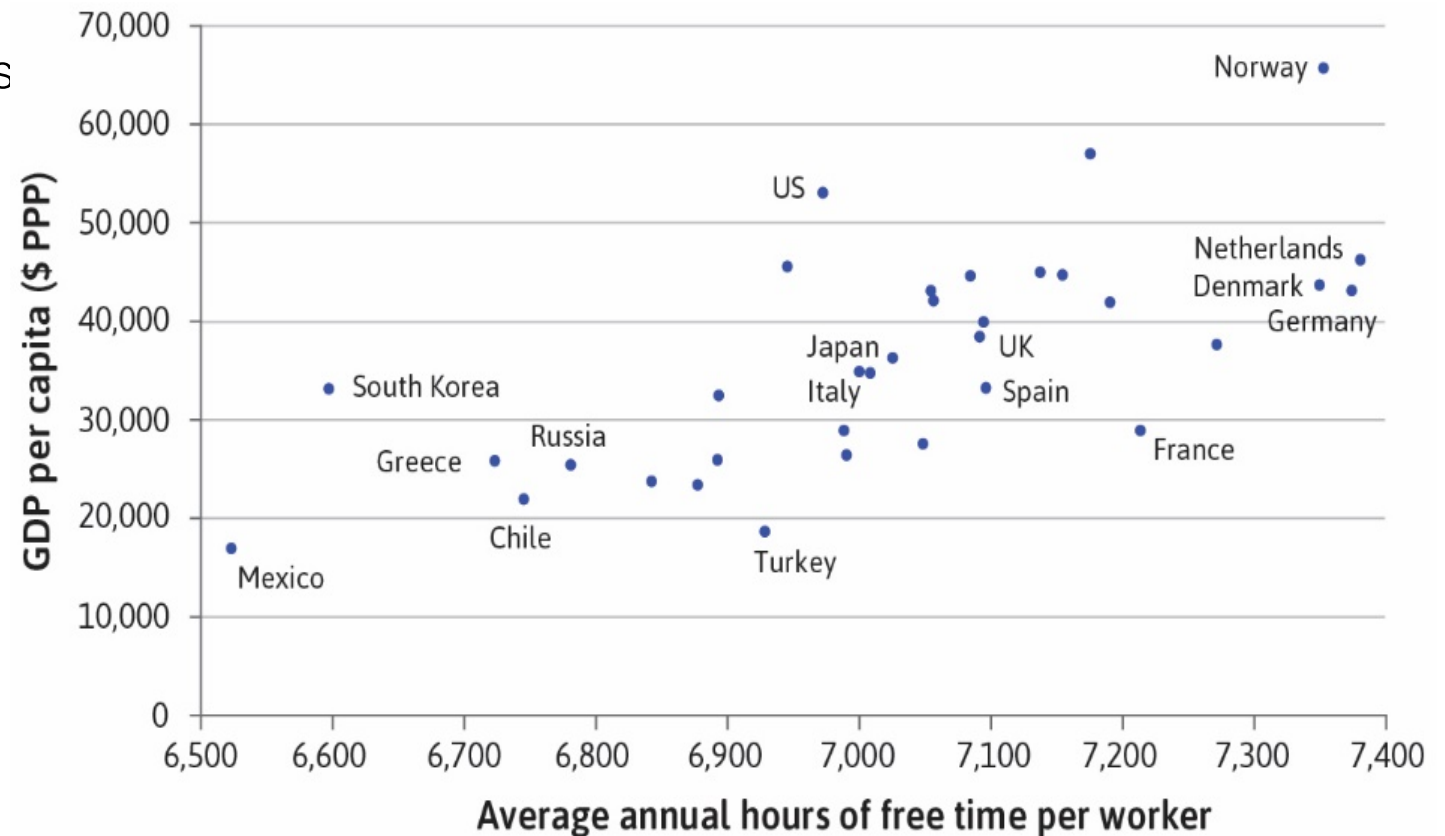
to criticize Malthus’ model finding its limitations

to provide their own discussions on why the model cannot be applied after 19<sup>th</sup> century



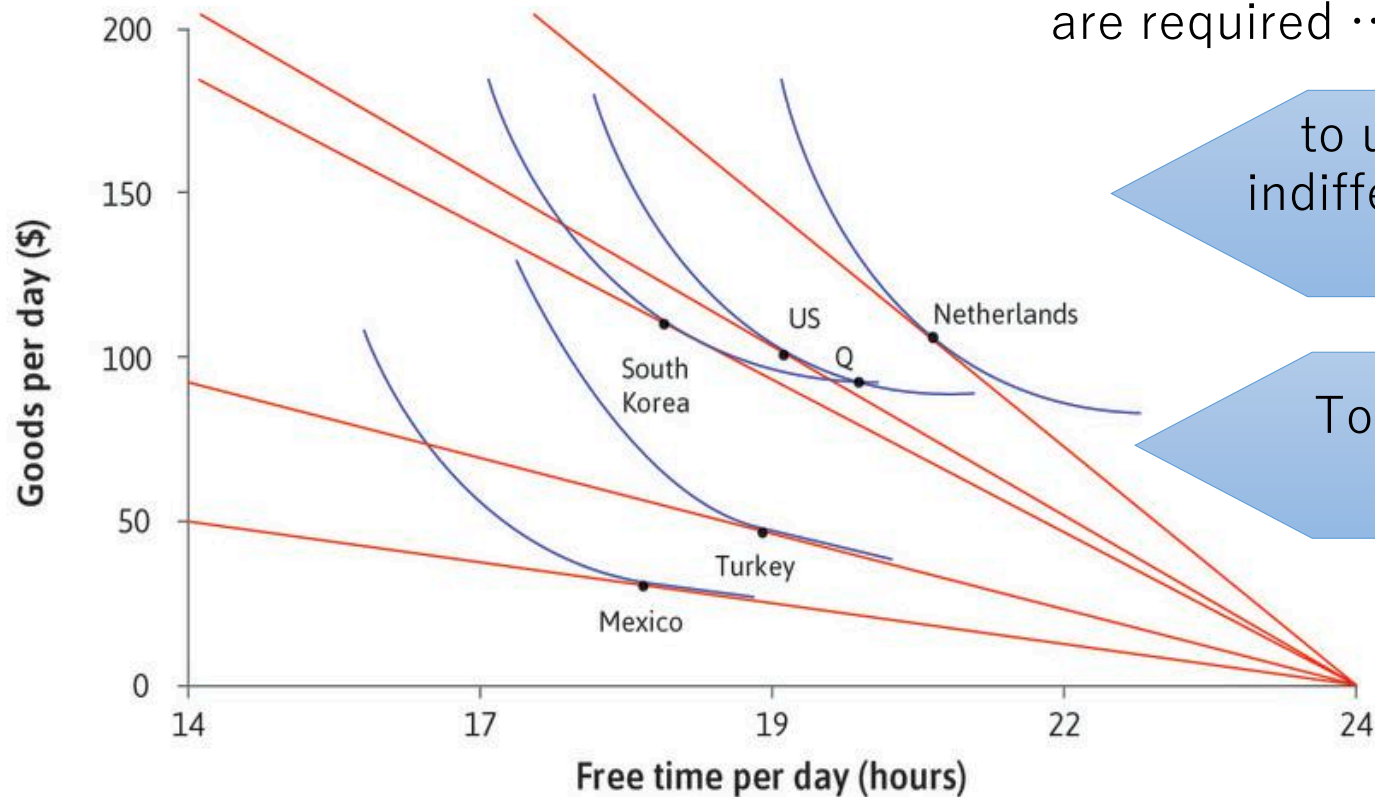
## Example③Scarcity, work, and choice (UNIT 3)

Eg Select two countries from the graphs below. Compare them and explain their differences in average annual hours of free time per worker and GDP per capita between the countries, applying the model of feasible frontier and indifference curve.



## Example③Scarcity, work, and choice (UNIT 3)

To address the questions, students are required ...



to understand concepts of indifference curve and feasible production frontier

To apply the concepts and models to a graph

## Outcomes: Motivation, Discussion skills, and Development of Economic Literacy

- **Motivation/interests:** Despite most of the students attend the course offered in English first time ever, the dropout rate was relatively low-- most of participants continue to submit mini-reports
- **Difference in Quality of Mini-Reports:** A certain range in levels in submitted mini-reports– some provide their own discussions based on good analysis, but some could not fully address given questions, writing only a few sentences.
- **Economic Literacy:** Significant developments in Economic Literacy regardless students' levels of English ability. (according to the ELT test scores performed before and after course)

## Submission rate of mini-reports by course

\*2 students who have registered but not attended any class are excluded from the data



# Test of Economic Literacy

- 1. The opportunity cost of a new city park is the*
- A. cost of staff and maintenance for the park.*
  - B. increased congestion from traffic around the park.*
  - C. best alternative use of resources given up for the park.***
  - D. lack of personal incentive for people to take care of a public park.*

Form A question 1

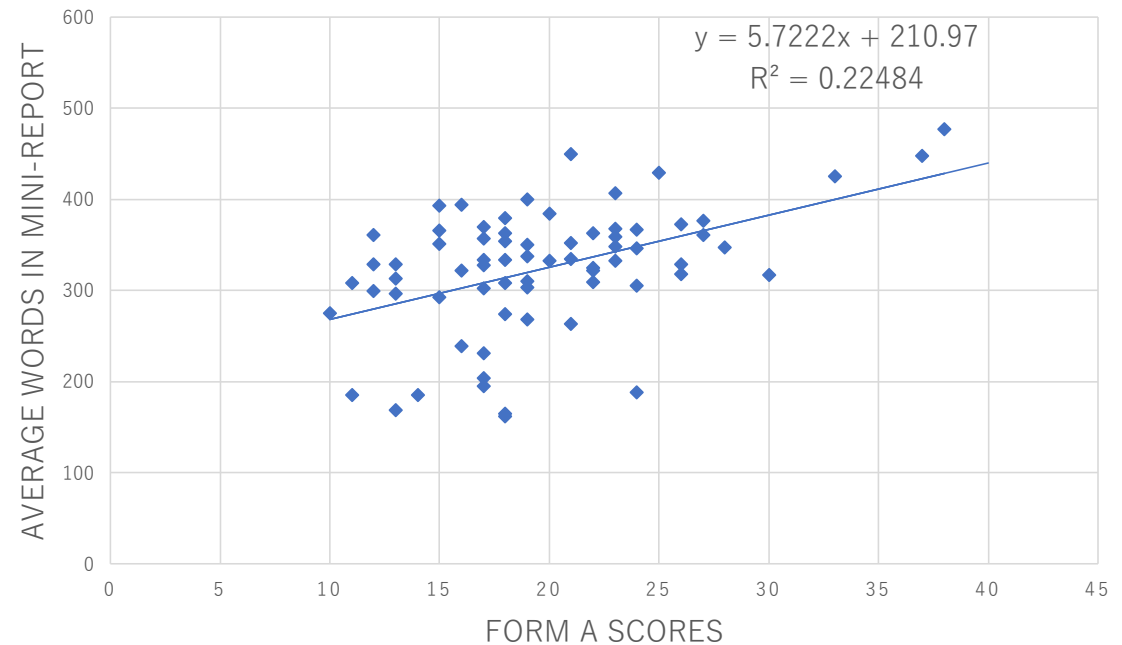
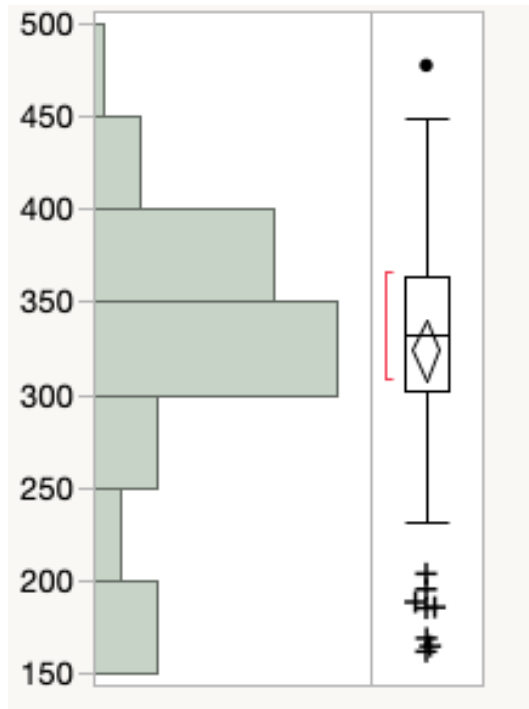
- 1. The opportunity cost of a new public high school is the*
- A. money cost of hiring teachers for the new school.*
  - B. cost of constructing the new school at a later date.*
  - C. change in the annual tax rate to pay for the new school.*
  - D. other goods and services that must be given up for the new school.***

Form B question 1

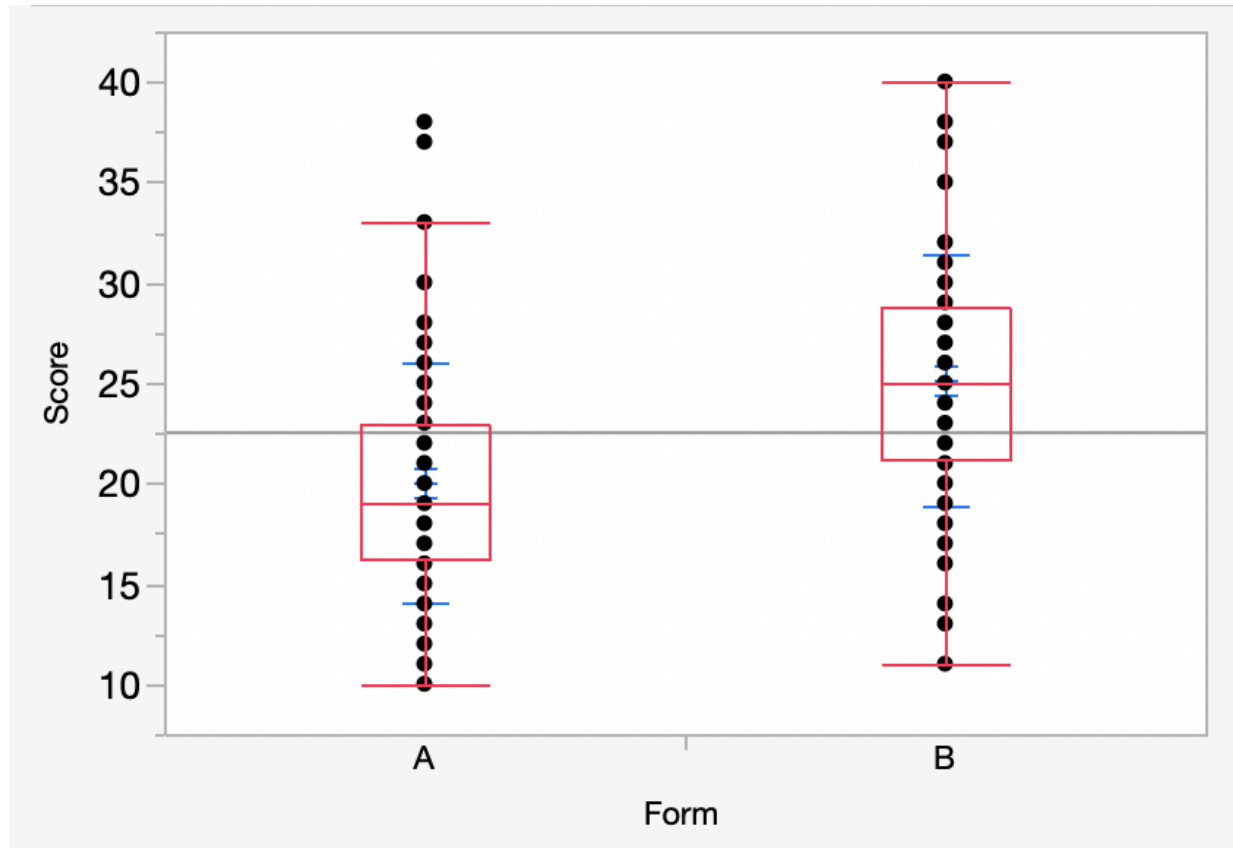
- Test of Economic Literacy ( Council for Economic Education 2013) is performed in class 2 (Form A) and class 15 (Form B) as well to estimate students' development
- 45 questions and 45 minutes (5 minutes longer than normal)
- Questions are performed online and randomly allocated for each students to avoid a cheating

## Averages words in Mini-report submission

- Students wrote 324 words in average for each mini-report
- A certain range in words, due to students' different English skills (S.D. is 68.8)
- A weak correlation between Form A scores and the average words (correlation coefficient is 0.474)



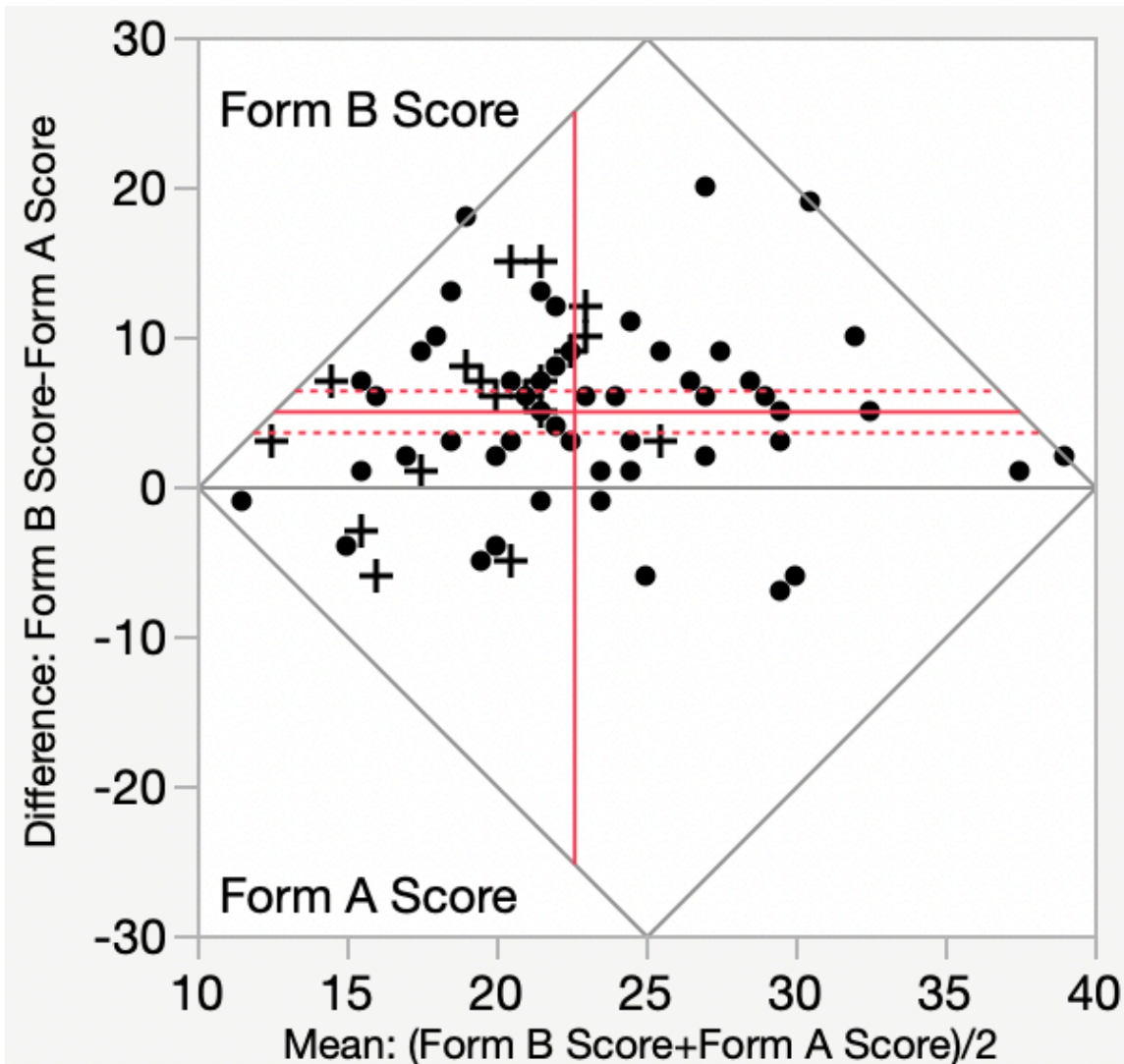
## Economic Literacy Test before and after the courses using CORE textbook



Form A is performed before the course (Class 2)  
Form B is performed after the course (Class 15)

Form	N	mean	S.D
A	72	20.042	5.91355
B	72	25.111	6.29902

Course participants those who did not take ELT tests or took only one time are excluded from the statistics



Difference of Economic Literacy Test before and after the courses using CORE textbook

+ : participants in International Political Economy  
 • : participants in Political Economy

Mean of difference	5.06944
S.E.	0.69885

$p < 0.0001$  (Wilcoxon's signed rank test)

Most participants increased their scores regardless their initial ELT levels



# Conclusion

- The CORE textbook can provide teaching materials with its rich data, graphs, facts, which contribute to keep students' interests and motivations.
- The CORE textbook introduces theoretical models as 'tools' to critically analyze economic facts. This would contribute to develop students' discussion skills.
- Despite relatively lower English skills as well as wide range in students' levels, courses using CORE textbook have raised students' Economic Literacy, via facts and discussion based mini-report submission.

# Conclusion

## Limitations and challenges

- Group-work should be more ideal to develop discussion skills, but there are still difficulties due to cultural or linguistic barriers in Japan.
- Students could develop their Economic Literacy via CORE, but whether they also deepen their understandings on economic models or theories are still unknown.
- The content of the CORE is basically focused on the western world, ignoring regionally specific situation in Japan or in developing countries. Therefore, students may have difficulty to connect actual situation they are facing (eg job hunting in labor market in Japan)

Council for  
Economic  
Education  
2013, p.18

**TABLE 3. Aggregate Statistics for *TEL* Norming Sample**

	Form A	Form B
<b>Sample Size</b>		
Number of students	3,682	3,686
Percent with economics	50	49
<b>Reliability</b>		
Coefficient alpha	.91	.90
Standard error of measurement	2.99	2.97
<b>Means</b>		
<i>Overall (total sample)</i>	23.32	23.17
[A = 3,682; B = 3,686]	(9.70)	(9.29)
<i>With Economics</i>	27.02	27.03
[A = 1,829; B = 1,816]	(9.77)	(9.30)
Basic (general/regular)	25.28	25.31
[A = 1,494; B = 1,493]	(9.25)	(8.70)
Advanced (honors/college)	34.75	34.97
[A = 335; B = 323]	(8.16)	(7.75)
<i>Without Economics</i>	19.68	19.43
[A = 1,853; B = 1,870]	(8.12)	(7.60)
Basic (general/regular)	19.09	19.01
[A = 1,702; B = 1,733]	(7.84)	(7.40)
Advanced (honors/college)	26.35	24.75
[A = 151; B = 137]	(8.27)	(8.20)

Notes: (1) Sample sizes are in brackets.

(2) Standard deviations are in parentheses.