



RESERVE BANK OF AUSTRALIA

Explaining and Teaching Economic Concepts in the Classroom Productivity

Teacher Immersion Event 2023

Education



RESERVE BANK OF AUSTRALIA

Teaching Productivity in the Classroom

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Education

Our plan for this session

- Clarifying productivity for students (linking it to their real world experiences)
- What students need to know about productivity
- Teaching ideas around productivity
- Your challenges in the classroom regarding productivity – Q&A

What could productivity look like? (A)

- Player A takes 29 shots and makes 21 of these
- Player B takes 29 shots and makes 3 of these



What could productivity look like? (B)



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- Eric struggles with the recipe. He frequently stops to ask for assistance; he's constantly running back and forth to the stock room to get ingredients.
- Kayla also struggles with the recipe. But she wrote out a cheat sheet with key steps and has the ingredients all laid out in the right sequence.

What could productivity look like? (B)



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- Kayla also struggles with the recipe. But she wrote out a cheat sheet with key steps and has the ingredients all laid out in the right sequence.

During a lunch shift, Kayla makes twice as many sandwiches as Eric.

Productive people (and other factors of production) create a productive economy

- What does it mean for someone to be productive?

It's not just about putting in the work...

...it's about the **output from that effort**

- What does it mean for an economy to be productive?

Inputs to production (like labour, capital, land) are being put to work...

...and they are increasing the value of goods and services produced in the economy

- As economists, we are concerned with the growth in productivity



So how could we, in plain English, define productivity?

Start by getting clear on the growth in productivity

- Students may not have thought deeply (or economically) about productivity
- If labour is *more* productive*, each unit of labour is producing more output per hour worked
- If an economy is *more* productive, it is producing more output for all the available inputs

Think back to Eric – is he productive or just busy?

Students need to know common productivity content...even if the syllabus emphasis differs

Productivity elements

- What is productivity?
- Productivity of labour

Productivity and policy

- Aggregate supply
- Microeconomic reform
- Labour market policies

Activity one: How can an economy achieve productivity growth?

Higher levels of productivity will produce more output for the available inputs



Let's think about the inputs of labour and capital

How could we make labour more productive?

How does a business decide on the split between labour and capital?

Activity one: Achieving productivity growth

- Strategies to increase the productivity of labour?

- A company is considering investing in cutting-edge machinery. How could this affect overall productivity?

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(How could machines assist with creating more output per input?)

Activity one: Achieving productivity growth

- Strategies to increase the productivity of labour?

(How can we help workers produce more per hour worked?)



What role could education and training play?

- A company is considering investing in cutting-edge machinery. How could this affect overall productivity?

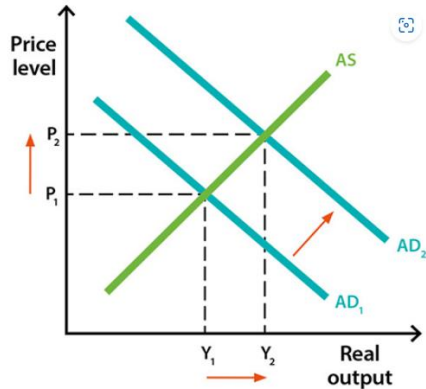
(How could machines assist with creating more output per input?)



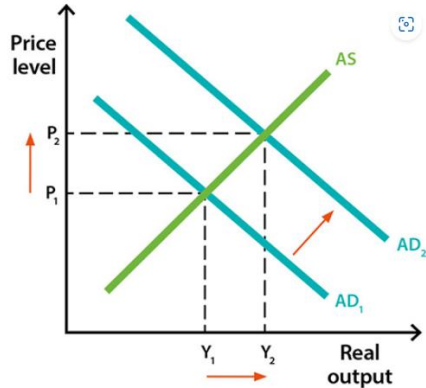
How could capital equipment assist labour productivity?

Activity two: The link between productivity and inflation

- Let's consider two situations
 - A. An increase in AD
 - B. An increase in AS
- Let's start by drawing these – and consider the relative change in prices



- Increase in AD
 - If aggregate demand expands without an increase in aggregate supply then prices will rise
 - i.e. the productive capacity of the economy is the same
 - Demand-pull inflation (price level rises on LHS)



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 - Demand-pull inflation (price level rises on LHS)



- Increase in AS
 - The economy increases its productive capacity (total supply) and so can produce more (with same amount of resources)
 - Output rises...but prices will actually fall
 - Economy can achieve non-inflationary growth (thanks to productivity)

Activity three: Incorporating productivity evidence into student responses

A student writes:

Australia has experienced relatively low productivity growth in recent years.

- Type of productivity – labour, multifactor (with brief definitions to demonstrate knowledge to markers)
- What does “low” mean? What numbers can we use to show rather than tell?
- What are the recent years?

Activity three: Incorporating productivity evidence into student responses

A student writes:

Australia needs to achieve higher levels of productivity to boost aggregate supply and ensure low-inflation growth.

- How could the country increase productivity? Let's think about technology, innovation and education
- How does increased productivity lead to a rise in AS? A better machine could increase the number of t-shirts produced each hour
- How does it create low-inflation growth? Greater productivity means we can produce more goods and services at lower prices