

Teaching Plan

Title	Scarcity & Production Possibilities Frontier
Instructional Objectives	<ul style="list-style-type: none"> ➤ To demonstrate the basic economic concept of scarcity to students. ➤ To illustrate how a production possibilities frontier is derived and drawn. ➤ To list out the factors that shift the production possibilities frontier.
Keywords and Concepts Illustrated	<ul style="list-style-type: none"> ➤ Scarcity ➤ Production Possibilities Frontier
Needed Time	➤ A double-period lesson, 80 minutes in total

Sessions	Details	Time Spent
Activity/ Announcement	1 Divide students into 4 groups and set up their production areas near the four corners of the classroom.	5 mins
	2 Assign two students of each group to be the Quality Control. Group 1's QCs should monitor group 2's products; group 2's QCs should monitor group 3's products and so on.	5 mins
	3 T: Today we are going to produce two types of products – Paper rings and aeroplane. Let me show you how to produce these two products (refer to Figure 1 for suggestion).	5 mins
	4 T: We will have 5 rounds of production, you have 30 seconds for each round. (Project Table 1/draw it on a flipchart paper and post it on the blackboard). In round 1, all members of each group produce aeroplanes only. In round two, 3 members will produce paper rings, and the other 7 will produce aeroplanes and so on. After each round of production, the group's QC will report to me the number of qualified paper rings and aeroplanes. I will keep the record in this excel worksheet/on this flipchart paper. The group that produces the largest number of paper rings and/or aeroplanes will win a prize! (For those teachers who do not have access to a notebook computer, you can ask each group's QC to come out and record the number on board.)	5 mins
	5 Distribute a stapler and a pile of A5 paper to each group.	10 mins
	6 Teacher times 30 seconds for Round 1, record the data and ask students to clear their working areas before Round 2 commences.	
	7 (After 5 rounds) Teacher who doesn't use computer should complete Table 1 and draw the PPF on board.	20 mins
	8 Game Consolidation: 8.1 T: Let's see what we can learn from this game. Each group of you represents an economy. Can you tell me what are the resources you have in your own economy? (Ans.: labor, papers, stapler, staples, & the working area). 8.2 Explain the concept of production possibilities frontier (PPF) and plot the PPF as you explain.	

	<p>8.3 Can you suggest a reason behind the negative slope of this curve? (Scarcity. Refresh students' memories on the concept of scarcity. Explain how the problem of scarcity results in building up a negatively sloped PPF.)</p> <p>8.4 What is the reason behind the concavity of the PPF? (The existence of increasing opportunity costs is the reason.)</p> <p>9 T: What if I give each group of you a cutter, what will happen? Let's play again and see. You will still have 30 seconds for each round and a total of 5 rounds. Basically labor arrangement will be exactly the same as the first time we played just now. The only difference is you have a cutter.</p> <p>10 Teacher times 30 seconds for Round 1, record the data and ask students to clear their working areas before Round 2 commences.</p> <p>11 (After 5 rounds) Teacher who doesn't use computer should complete Table 2 and draw the PPF on board.</p> <p>12 Game Consolidation:</p> <p>12.1 So what happen to our PPF this time? (The new PPF should shift outward along the Paper Rings axis as the new piece of technology i.e., the cutter, benefits only the production of paper rings. Note that due to the fact that "Practice makes perfect", more of aeroplanes may be produced this time, but it should increase at a lesser extend than the increase in paper rings. Plot this new PPF on the same diagram for students to see the difference).</p> <p>12.2 What contributes to the difference in these two PPFs?</p> <p>12.3 What happens if there are more labor added to each group? What will happen to the PPF? (Explain the factors that shift the PPF).</p>	<p>10 mins</p> <p>20 mins</p>
Tools	<ul style="list-style-type: none"> ➤ A5 papers ➤ Cutter x 4 ➤ Staplers (with enough staples) x 4 ➤ Notebook computer/flipchart papers ➤ Prizes for the winning groups. 	
Definitions	<ul style="list-style-type: none"> ➤ Production Possibilities Frontier – the boundary between those combinations of goods and services that can be produced and those that cannot (Parkin, 1996: 44). ➤ Scarcity – This is when wants exceed the resources available to satisfy them (Parkin, 1996: 8). 	
References	<ul style="list-style-type: none"> ➤ Experiment: <ul style="list-style-type: none"> ➤ Neral, J. & Margaret R., 1995. "Teaching Tools Experiential Learning in the Undergraduate Classroom: Two Exercises". <u>Economic Inquiry</u>. 33 Pp. 170 – 174. ➤ Definitions: <ul style="list-style-type: none"> ➤ Li, W., S., 1997. <i>New Introductory Economics</i> 1 2nd 	

	ed. HK: Longman Asia Ltd. ➤ Parkin, M., 1996. <i>Economics 3rd rd.</i> USA: Addison-Wesley Publishing Company, Inc.	
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Appendix Teacher's materials

Figure 1 Instructions of producing Paper Rings & Aeroplanes

Table 1 Production Record

Table 2 Production Record (Increased in Technology)