

## Teaching Plan

Title	Prisoners of War Game	
Instructional Objectives	<ul style="list-style-type: none"> <li>➤ To discover the reason behind voluntary trade</li> <li>➤ To derive one of the properties of money – medium of exchange</li> <li>➤ To experience how competition drives down prices</li> </ul>	
Keywords and Concepts Illustrated	<ul style="list-style-type: none"> <li>➤ Gains from trade</li> <li>➤ Medium of exchange</li> <li>➤ Endowment</li> <li>➤ Preference</li> </ul>	<ul style="list-style-type: none"> <li>➤ Voluntary trade</li> <li>➤ Relative price</li> <li>➤ International trade</li> </ul>
Needed Time	➤ A double-lesson period, 80 minutes in total.	

Sessions	Details	Time Spent
Activity/ Announcement	<ol style="list-style-type: none"> <li>1 Students are divided into four groups A1, A2, B1 &amp; B2. Yet, four students are chosen to be the observers. They will be given other assignments later.</li> <li>2 Instruct students to sit according to their group at the four corners of the classroom. Four groups of students are separated so that communication between groups is not possible. They will be acting as prisoners of war captured in four different war camps.</li> <li>3 Teacher (T): In today’s experiment, you will be acting the prisoners of WWII. You are captured in four different war camps and communication between camps is not possible. I will use some stings to mark your camp area. No one can go in or out from your camp (Please refer to Figure 1 for .suggestion).</li> <li>4 T: Today, these war camps receive donation from a charity, so that each of you will be given a parcel. (Distribute to each student a parcel. There are two kinds of parcels, Pack A &amp; B, both with three different kinds of coupons inside. Those coupons can be exchanged for real goods at the end of game. Pack A should be distributed to those groups’ names with an “A” &amp; pack B should be distributed to those names with a “B”. <i>Please refer to the “Tool” session for suggestions of package content. The items listed from now on are suggestion only</i>). Inside each parcel, it has pens (show the pen to students); packets of seaweed (show to students) and bags</li> </ol>	7 mins

	<p>(show to students). It also has a table (please refer to Table 1) for you to record what you have at the end of each period. For the first period, you can see the numbers have been filled in for you (<i>The numbers filled in are examples only</i>). .</p>	
5	<p>T: See if you are satisfied with the contents of your parcel. If you are not satisfied you can exchange with your inmates. I will give you five minutes to trade within your camp. To facilitate your trading, you will only see coupons in your parcel, but these coupons can be exchanged for real goods at the end of the experiments and they will all belong to you.</p>	
6	<p>T: OK, you can now open your parcel and you have five minutes to trade within your group. (As students have different preferences on each item, they have the incentive to trade for their preferred items.)</p>	10 mins
7	<p>After five minutes, teacher asks all students to fill in their own table with the number of good they have at the end of this round. Invite two to three students and ask the following questions:</p> <p>7.1 Who is better off after trading? Please raise your hand. Teacher counts hands and fill in Table 2.</p> <p>7.2 Who is worse off after trade? Please raise your hands and let our helpers count the number. Teacher counts hands and fill in Table 2.</p> <p>7.3 (Picks two to three students with same endowment to share what they have got before and after the trade and record it in Table 3. This is to illustrate – difference in personal preference causes different relative prices resulted among students.) Why did we have different relative prices on the same goods?</p>	
8	<p>T: Now, the charity has another donation! (All the “A” groups will be given four more packets of seaweed and all the “B” groups will be given three more pens. Distribute more coupons to group As and Bs.)</p>	5 mins
9	<p>T: Again, you will have five minutes to trade within your war camp.</p>	10 mins

	<p>10 After five minutes, ask students to fill in their table with the number of goods they have at the end of the second round. Teacher discusses the following questions with students:</p> <p>10.1 Who is better off after trading? Please raise your hand. Teacher counts hands and fill in Table 2.</p> <p>10.2 Who is worse off after trade? Please raise your hands and let our helpers count the number. Teacher counts hands and fill in Table 2.</p> <p>10.3 (Ask students to put up their hands if they have traded for the same type of good in both trading periods. Then ask them the following question): What and how many did you forgo for the good in both periods of trading? What happened to the relative prices? (Record it in Table 3)</p> <p>10.4 Note that the feature of money, as a medium of exchange starts to stand out. Explain the term “medium of exchange”.</p>	
	<p>11 T: Now, there will be two voluntary doctors entering your camps to provide you medical services. Each doctor is allowed to go to two camps only. (These doctors are those students who do not belong to any group and they have no initial endowment.) Besides providing medical services, doctors can also facilitate trading between the two camps they visit.</p> <ul style="list-style-type: none"> <li>➤ Doctor 1 is assigned to Groups A1 &amp; B1</li> <li>➤ Doctor 2 is assigned to Groups A2 &amp; B2</li> </ul> <p>(Doctors are supplied with a piece of blank paper to record down the different relative prices offer to them).</p> <p>T: I will give you 8 minutes to trade with the other group, but only with the help of the doctor.</p>	5 mins
	<p>12 After 8 minutes, trading stops and students are given a minute to fill in their table with the number of goods they have at the end of the third round. Then teacher discusses &amp; explains the following questions with students:</p> <p>12.1 Who is better off after trading? Please raise your hand. Teacher counts hands and fill in Table 2.</p>	15 mins

	<p>12.2 Who is worse off after trade? Please raise your hands and let our helpers count the number. Teacher counts hands and fill in Table 2.</p> <p>12.3 (Ask the two doctors) Did you facilitate trade just now? How did you help? (Ask them what the trading prices received and offered by the buyers and sellers were and record it in Table 3.)</p> <p>12.4 (If any doctor has gained something after this round) What did the doctors serve as besides providing medical service? They did not have any initial endowment at the beginning. How can she/they gain something after the game?</p> <p>12.5 Why were the relative prices between group As and group Bs different? (Because these two group students' endowment and preference are not the same.)</p> <p>13 T: This time, I will introduce another two doctors and allow all of them to visit all the camps to facilitate trade freely. This time, I will give you 10 minutes to trade.</p> <p>14 Teacher stops the trading after 10 minutes and ask students fill in their table with the number of goods they have at the end of this round. Two to three students are invited to share what they have got after the trade &amp; record the difference in relative prices amount students. Teacher discuss &amp; explains:</p> <p>14.1 Who is better off after trading? Please raise your hand. Teacher counts hands and fill in Table 2.</p> <p>14.2 Who is worse off after trade? Please raise your hands and let our helpers count the number. Teacher counts hands and fill in Table 2.</p> <p>14.3 Can you observe any change in the doctors' behavior?</p> <p>15 Teacher concludes any of your observation during the experiment with students.</p>	<p>15 mins</p> <p>5 mins</p>
<p>Roles of Teacher</p>	<p>➤ Facilitator</p> <p>➤ Observer</p>	

Tools	<ul style="list-style-type: none"> <li>➤ Long stings to mark the 4 camp areas</li> <li>➤ Packs of parcel enough for every student. Suggestion only. <ul style="list-style-type: none"> <li>■ For Pack A, prepare: <ul style="list-style-type: none"> <li>◆ 6 Packets of seaweed</li> <li>◆ 3 Pens</li> <li>◆ 2 bags</li> </ul> </li> <li>■ For Pack B, prepare: <ul style="list-style-type: none"> <li>◆ 3 Packets of seaweed</li> <li>◆ 5 Pens</li> <li>◆ 1 bags</li> </ul> </li> <li>■ For additional seaweeds to everyone in Group A, prepare: <ul style="list-style-type: none"> <li>◆ 4 Packets of seaweed</li> </ul> </li> <li>■ For additional pens to everyone in Group B, prepare: <ul style="list-style-type: none"> <li>◆ 3 Pens</li> </ul> </li> </ul> </li> </ul> <p>Use coupons (refer to Figure 2, printed them on 3 different color papers) instead of the real goods in the parcels. Store the coupons in envelopes as the parcels to be distributed to each student.</p> <ul style="list-style-type: none"> <li>➤ Print enough Table 1 to insert in the parcels</li> <li>➤ Print Table 2 &amp; 3 on transparencies</li> <li>➤ Overhead project and screen</li> <li>➤ Projector pens</li> </ul>	
References	<ul style="list-style-type: none"> <li>➤ Radford, R.A. (1945): “The Economic Organization of a P.O.W. Camp,” <i>Economica</i>, pp. 189-201</li> </ul>	

**Appendix      Materials for Teacher**

Figure 1	Sitting Plan	Table 1	Record of Goods Own
Figure 2	Coupons	Table 2	Better Off Vs Worse Off
		Table 3	Record of Relative Prices