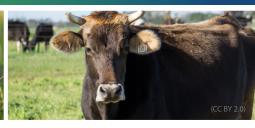


Agriculture in Education: an educational resource for the Year 7 Economics and Business

The Farm Game: interdependence of consumers and producers in the market











Resource: The Farm Game: interdependence of consumers and producers in the market

	Content Description	
Economics and Business Knowledge and Understanding	The ways consumers or producers respond to and influence each other in the market (ACHEK017)	ACHEK017

Source: Australian Curriculum, Assessment and Reporting Authority (ACARA), downloaded from the Australian Curriculum website on 18 December 2014



Learning Outcome/s

Students will

- describe the interdependence of consumers and producers in the market; and
- explain the importance of short- and long-term planning to individual and business success and identify different strategies that may be used.

Description

This resource takes an inquiry based approach using a farming context to provide the opportunity for students to develop the understandings about the ways consumer or producers respond to and influence each other in the market. The resource begins with a statement and question designed to elicit what students already know and attune and extend thinking around the topic. The Farm Game will reinforce concepts and understandings that are discussed.



Setting the Scene

Set the scene beginning with viewing the Video <u>Weston Farm horticulture/organic farm Tasmania</u> or <u>Get Shucked Oysters</u> from AgriFood Skills Australia's YouTube Channel <u>https://www.youtube.com/channel/UCuBA0F-d8sXgIZ0x1Wltlog</u>

Have the students consider the following before, during and after viewing the videos:

Weston Farms:

Richard Weston owns and operates a farm in Tasmania.

- 1. What type of farm is Weston Farm?
- 2. Describe what the farm "produces". Why do you think Richard has such a variety of produce on his farm?
- 3. Although Richard says the farm is small they have a "competitive advantage" through doing what? What is the 'key' for them? (you may wish to discuss the concept of "competitive advantage" with the students)
- 4. Who do you think Richard's "consumers" are? And what are they looking for?
- 5. How does he think he has made a difference to agriculture?

Get Shucked Oysters:

Joe Bennett runs and owns Get Shucked Oyster Farm on Bruny Island, Tasmania.

- 1. Explain why Joe calls his business an oyster farm that is why is it a farm?
- 2. Explain why he calls himself a "primary producer".
- 3. List the activities that Joe has taken to "grow" his business and meet the demand of his consumers.
- 4. Explain the "full circle" Joe uses to describe his business.
- 5. What is his "value proposition?"

Provide students with the following statements and questions:

"We are a nation of consumers. We value possessions, like mobile phones, very highly and we love our food. But there would be a massive problem if all we did was consume. We also have to be a nation of producers."



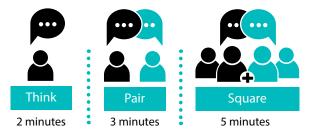
What do you understand by this and why is there a relationship between consumers and producers in the market?

Students may wish to create a "glossary" of economic terms, if they haven't created one already. Or have them revise common economic terms.

Have them explain the following terms:

- consumer
- producer
- the market
- primary producers
- secondary producers
- tertiary producers
- supply and demand
- · competitive advantage or
- · value proposition

Use Think, Pair, Square strategy for students to discuss this statement- that is two minutes personal reflection and optionally make notes; three minutes to explain their ideas to a partner and vice versa; and finally 5 minutes for pairs to join with another pair and share their combined ideas. Brief responses from groups can then be taken as a whole class.





Work Task 1

Explain that the class is going to further investigate the relationship between consumers and producers and market forces from the perspective of primary producers. Each student will be assigned a particular type of farmer or primary producer. Suggested occupations are:

- Organic farmer
- · Dairy farmer
- Sheep farmer
- Wheat farmer
- · Viticulturist and Winemaker
- Fisherman

Using the above list or similar the class will be divided into 6 groups. Have the students research 5 key points that provides a description of what the farmer does and have them identify at least 3 key "selling points" of each. For example, an organic farmer grows food that is free from chemicals and non-organic fertilisers. The selling point is that they provide healthy foods.

Ask each group to brainstorm all the factors that might affect their business and categorise these factors as:

- beyond their control
- able to be controlled (i.e. prevented or initiated)
- · able to reduce or enhance the consequences

Examples are: particular types of weather and market forces.

Record brainstorms on broadsheets.















Organic

farmer	farmer	farmer	farmer	Winemaker	1 isrici i i i i i i i i i i i i i i i i i i
Description					
1					
2					
3					
4					
5					
Selling points					
1					
2					
3					
Factors					
Factors beyond their control:					
Factors able to be controlled:					
Factors able to reduce or					

Presentation

Groups should be prepared to present their results to the class after a suitable period. You may need to revise or introduce the concept of market forces.



Possible Assessment Item

enhance the consequences:

When presenting to the class students should demonstrate team work and as a group clearly share with the class an acknowledgement of the factors beyond their "farmer's control", such as the weather. But most importantly they should recognise and promote in their presentation how market forces and consumer demand can be manipulated to the advantage of producers. For example they can negotiate milk prices with the supermarkets or they can initiate a marketing campaign that will increase consumer demand i.e. Paul's Smarter Milk.

Students could also support their presentation by researching a specific advertisement linked to their occupation that they believe would convince people to buy their product. Alternatively they could create their own marketing strategy to present.

It is important to provide feedback to the groups for these presentations to reinforce the learning for both themselves and the audience. Peer reviews are a great way to do this. Ensure that students recognise the connection between consumer demands and how producers, to some extent, through advertising, are able to manipulate this.



The Farm Game

This activity is designed to reinforce the understanding that a variety of factors may affect the success of a producer's business and in particular those involving consumer demand.

- Introduce this activity explaining that this game has been used in developing countries e.g. in Africa to help local farmers to understand about planning, risks and diversifying to manage risks. It will begin to give students an appreciation of some of the factors involved in farming.
- The game uses beans (purchase from your local rural supply store or supermarket) as both a currency and to represent a crop. Players aim to build their wealth by planting crops (beans) and harvesting them.
- Students should ideally work in groups of four for this activity. Three students will be farmers and the fourth will be
 a banker. Each farmer owns a farm but is also part of a "collective" all the farmers seated at their table are part of
 their collective. They can make decisions together or not. The banker oversees the crop plantings and provides the
 "harvested" crops and collects failed crops and insurance from the farmers.
- The game is played in seasons and a dice is used to determine if in any season crops have been successful or failed.

 The teacher will manage the seasons by rolling the dice. Each number on the dice is ascribed a factor that affects crops

 see table below.

Dice Roll	Consequence	Explanation
\cdot	Flood. Lose all crops. No harvest.	Banker takes all planted beans unless a farmer has insurance for flood. If crops are insured for flood farmers keep the beans they planted.
••	Prices undercut by overseas market. Lose half of crop	In this case farmers keep all the beans they planted but don't receive any more from the banker.
••	Good season. Harvest double what was planted.	Banker gives each farmer the number of beans they planted.
	Advertising campaign has identified that your crop is a superfood! Consumers love it. Harvest triple what was planted. (double for the plants and extra because of the high price you receive for the crop)	Banker gives each farmer double whatever number of beans that they planted.
::	Drought. Lose all crops. No harvest.	Banker takes all planted beans unless a farmer has insurance for drought. If crops are insured for drought farmers keep the beans they planted.
	Consumers don't like your crop this year. It was a good growing season and you would have harvested double what you planted, but you lost most or all due to the low price you received and crops you couldn't sell.	If only one bean is planted the banker takes it. If two beans are planted the banker takes one. If three beans are planted the banker takes two.

- It is suggested that a fixed time between rolls be used to allow students to make decisions but keep the game moving in a timely fashion.
- Each farmer starts with two beans, a shed (paper cups from \$2 shops are perfect for this!) and plot of land (on worksheet to be printed for each student). For each bean that is planted players can expect to gain one extra bean if their crop is successful. For example, plant 2 beans and if the crop is successful the farmer will harvest 4 beans. In practice this means the farmer keeps the two planted beans and receives two more from the banker.
- Due to the size of their farms no more than 3 beans per farm are able to be planted at one time. Each season farmers can choose to pay one bean to 'protect' against flood and a further bean to protect against drought. Bankers will collect insurance payments before the teacher rolls the dice for a new season.
- Bankers may need a large supply of beans (minimum of eighty beans each) to keep in their vaults if the game continues for 6 seasons. Alternatively as the amount of beans accumulates a different type of counter could be introduced equal to 10 beans which bankers can exchange.
- Game play progresses thus:
 - 1. Farmers choose how many beans to plant and whether to buy insurance. They may choose to combine resources with other farmers in their collective if they wish. Allow a couple of minutes for decisions to be made and farmers to record on the Farm Game worksheet provided what they plan to do. Bankers collect any insurance.
 - 2. Teacher rolls dice and explains consequences. Bankers collect or pay out beans to the farmers for their harvest.
 - 3. Farmers record their gains or losses on the worksheet.
 - 4. Repeat steps one to three for each season.

There can be a number of winners to this game. The aim for individual farmers is to collect as many beans as possible, so the individual winner will finish with the most beans. However there can also be a winning collective that finishes with most beans. The banker is not left out. The winning banker will be one with the most beans still in the 'vault' or the first banker to bankrupt all of his farmers!



The Farm Game



Instructions

You will have six "months" to see what you can do. A month is represented by a roll of a dice that will also tell you how successful your harvest has been.



Flood insurance = 1bean

Drought insurance = 1bean

Dice	Consequence
•	Lose all crops to flood
•	Lose half of crop to low overseas market price
·.	Harvest double what was planted
	Harvest triple what was planted - high consumer demand
	Lose all crops to drought
::	Lose all crops - low price and consumer demand

Record Keeping

Season	Dice rolled	Starting total	Savings	Crops	Insurance	Harvested	End of Season Total
1		2					
2							
3							
4							
5							
6							



Re	flection: The Farming Game
1.	At the end of the game how many beans did you have?
2.	Could you have done better than you did? Did you work with your Collective? Describe what you could have done differently that would have improved your final tally of beans.
3.	In the game why can consumer demand be potentially more devastating or more beneficial than floods or drought?
4.	In what ways do you think this game is realistic – that is, similar to what happens in the real world?
5.	In real life putting aside savings and buying insurance are things that can be part of a plan for the future. But how does a farmer plan for consumer demand? What other things could a farmer do to give him or her the best chance of success?
6.	How could we improve this game? Are there things we could do to make it more realistic?
Ju	st For Bankers: Answer questions 3, 4 and 5 and the following questions:
	ve a brief description of how you thought each farmer in your group performed.
В.	
C	
Ho	w did they perform as a collective?

Produced by



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