

# Tobacco and Wheat

## By Ellen Schwindt

### **Objectives:**

After completing this lesson, students will be able to:

- list economic roles in the colonial tobacco economy and in the colonial wheat economy
- identify connections between the tobacco and wheat economies
- identify regional places on a historical map and relate events associated with those places
- distinguish between services, raw materials, and manufactured products in an economy
- compare tobacco and wheat economies of 1700s to today's economy

### **MSPAP Outcomes and Indicators**

This lesson aligned with the following Maryland Learner Outcomes and Indicators:

### **Social Studies Grades 4-5**

#### **Peoples of the Nation and World**

- Analyze the characteristics of various cultures as evidenced in the development of Maryland and the U.S.
- Analyze the diverse cultural contributions that influenced the development of Maryland and the U.S.
- Examine decisions made by citizens of Maryland and the U.S. in terms of consequences for other peoples of the world, and vice versa.

### **Geography:**

- Locate places and natural features by interpreting and constructing maps using directions, legends, grid systems, boundary lines, and scales.
- Examine people's adaptation to and modification of their environment as a result of changes in technology.
- Examine the impact of geography on the industrial growth and economic prosperity of communities in the state, nation and world.

### **Economics:**

- Describe the relationship between available resources and the production of good and services.
- Explain how the exchange of goods and services connects Maryland with the world.

- Describe the relationship of supply and demand to the production and consumption of goods and services.
- Analyze historical and economic factors which have contributed to the growth and development of Maryland's economy.
- Analyze the effects of economic growth on the standards of living of individuals.

### **Skills and Processes:**

- Obtain, interpret, organize and use information from reading, asking questions, observing and listening.
- Obtain, interpret, organize and use print and non-print sources of information such as pictures, graphics, maps, globes, and artifacts.
- Define and clarify problems drawn from history and the social sciences, identify resources and prepare solutions based on available data.
- Make and analyze personal decisions and reflect on the results.

### **Math Content Grades 4-5**

#### **Outcome:**

Apply estimation strategies in computation with the use of technology in measurement and in problem solving: determine reasonableness of solutions.

#### **Indicators:**

- Add, subtract, multiply, divide whole numbers, fractions, decimals, integers, rationals
- Solve problems involving money, time, elapsed time.

### **Math Process Grades 4-5**

#### **Outcome:**

Connect mathematical topics within the discipline and with other disciplines.

### **Worksheets**

Worksheets needed for this lesson are:

- Exploring Economies Worksheet
- Ledgers for "The Wheat or Tobacco Game"
- Graphing Fortunes: Thoughtful Activity

All worksheets (as well as the "year cards") are in one document for easy printing. Use the link for the Worksheet on the Faculty Room page.

### **Other Materials**

In order for your students to complete the thoughtful application associated with this lesson, they will need to play “The Tobacco or Wheat Game.” For the game, you will need to print out:

- a gameboard for each group of four students (alternatively, this could be set up as a learning station that students could move through)
- a sheet of year cards for each student. There are four characters in the game: George Ellicott, William Lux Bowley, Charles Carroll, and Jacob Hain. Assign a character to each student and give students year cards for the appropriate character.
- Small objects to serve as markers in the game
- Graph paper and colored pencils for the thoughtful activity

### **Web sites used in this lesson**

- For background on “The Atlantic Economy and Colonial Maryland’s Eastern Shore: Tobacco to Grain” go to <http://www.patpnyc.com/reading9.htm>
- For a picture of Stratford Plantation, both a typical 18<sup>th</sup> century plantation and the home of the Lees of Virginia go to [http://www.stratfordhall.org/map/sitemap/great\\_house/index.htm](http://www.stratfordhall.org/map/sitemap/great_house/index.htm)
- For a photo of a reconstructed slave quarters on Stratford Plantation, go to <http://www.stratfordhall.org/map/sitemap/rsq/index.htm>
- For background information of archeology go to <http://www.stratfordhall.org/arch.htm>
- For some excellent background information on slave life in colonial America, and on coopers and wheelwrights, go to <http://www.history.org> This website is for Colonial Williamsburg. You must navigate to the information you want. Go to “Teach” on the home page, then to educational resources, then to “experience colonial life.”
- Artifact collection at Flowerdew Hundred : This is a great site that lets you search a collection of artifacts: <http://www.flowerdew.org/> Below are listed two items linked to the lesson in this collection.

gravy boat:

<http://etext.virginia.edu/etcbin/ot2www-fdew?specfile=/web/data/flowerdew/cat/fdewcat.o2w&act=text&offset=42160&query=gravy+boat>

Blacksmith made hoe:

<http://etext.virginia.edu/etcbin/ot2www-fdew?specfile=/web/data/flowerdew/cat/fdewcat.o2w&act=text&offset=120588&query=hoe>

- For information on environmental degradation in colonial Maryland, go to <http://www.chesapeakebay.net/bayprogram/facts/history/histneig.htm>  
This is written in student friendly language.

### **Teacher Background**

This is an economics lesson embedded in a history lesson. In Maryland, by 1780, wheat was a more important export than tobacco. This lesson explores the economic pressures that created a wheat economy out of what was once a tobacco economy. Intertwined in this theme is the impetus for the American Revolution. The lesson is framed by a story of particular places and particular people.

### **The Ellicott Brothers**

The story is of the Ellicott brothers: Andrew, George and John, who founded Ellicott City, Maryland. These three brothers were millers in Pennsylvania. They decided to start a new milling operation in Maryland. The three, when they were all in their twenties, pooled their resources to start a new mill. They spent 2 months scouting possible sites in Maryland on horseback. They eventually found a site with potentially unlimited water power: just what they had been looking for.

The Ellicotts wanted to be merchant millers; they wanted to buy grain, turn it into flour, and sell it to merchants who would export it, or consumers who would use it. (This was a break from tradition. Earlier millers had taken part of the flour ground from a farmer's grain as payment for the grinding, but did not usually buy the flour.) The site the Ellicotts found was particularly conducive to mill building because it had good water power, produced by the rapid change in elevation: the fall line. This desirable feature also contributed to the cost for building the mill: because the land was rugged, it offered greater water power. But the ruggedness of the land also required the Ellicotts to go to extra work to start their venture. Additionally, the site the Ellicott's chose was far from the nearest point of export: Elkridge Landing, the highest tidewater point on the Patapsco River.

The Ellicotts solved these two problems by engaging in road building. They first built a road to their site in order to haul in the heavy equipment needed for the mill. They then extended this road to Elkridge. Later, when faced with a shortage of wheat for grinding into flour, the Ellicotts built a road to a Charles Carroll's plantation. This encouraged Carroll to switch from tobacco production to wheat production. Carroll was an influential member of the community. He and the Ellicotts helped convince other area producers to switch to wheat.

The arrival of the Ellicotts on the scene began to change the economy at Elkridge Landing. They sold their first wheat flour in 1774 to William Lux Bowley, a merchant-captain who lived in the town. Eventually, the Ellicotts had enough flour to supply ships leaving from Elkridge Landing and from Baltimore. They built the first deep water wharf in Baltimore and began shipping flour there in the late 1770s.

### **Changing Economies**

This change from tobacco to wheat had many important ramifications. One was that the area's economy became much less dependent on slave labor. Another was environmental: tobacco cultivation had caused much depletion of the land. Wheat was not quite as hard on it, but, because the wheat economy was more diverse, and because populations began to increase, more land was cleared. This deforestation, along with strip mining for Elkridge's fledgeline iron industry, caused the Patapsco river at Elkridge Landing to collect enough silt in the late 1770's to stop ships from coming to the landing.

This lesson is structured around two specific times at and near Elkridge Landing. The first is the year 1751. At this time, the Landing was almost exclusively a tobacco port.

### **Slavery and Economics**

Students are asked to explore plantation life. They are introduced to characters in the lesson who contributed to the economy. They meet these characters through two central figures: Charles Carroll, planter and financier, and William Lux Bowley, a merchant-captain. Many of the characters were slaves. These slaves provided much of the labor for the tobacco economy. Although the lesson does not focus on this aspect of the economy closely, you may want to bring more information about slavery to your students. There are some excellent resources on the web for discussing slavery with students. Some of these are listed in this document.

The teacher is encouraged to explore some of these, if only to clarify your own thinking about this issue. What is essential to communicate to students is that the tobacco economy could not have functioned without slave labor, and that the wealth of planters was built on the backs of those who had no freedom.

### **Wheat Economy of the late 1770's**

The second time frame in the lesson is 1774. By this time at Elkridge Landing, the economy had diversified significantly. This time was the beginning of the transition from a tobacco economy to a wheat economy. A furnace to process local iron ore opened in 1753. Many more trades were represented in Elkridge by 1774. The Revolutionary War represented an opportunity to some local tradesmen. Tents were made at Elkridge to supply the troops fighting the British. Most significantly for this lesson, 1774 marks the first year of operation of Ellicott's mills. The central figures the students meet in 1774 are George Ellicott, the oldest of the Ellicott brothers, and Jacob Hain, a fictional farmer based on a group of German immigrants of the time. Through these two figures, students meet a blacksmith, a cooper, and a hopper boy, among others.

### **Introduction/Motivation**

Ask students to imagine together that the class is going back in time. Go back in time in increments of 50 years. At each "stop" along the way, ask students to guess where they would get the necessities of life (food, clothing, shelter). The point of this activity is to get students to consider where items they use and consume originated and where other people in history obtained them.

### **Lesson Development**

Hand out the worksheet titled "Exploring Economies Worksheet." Explain the word roles by having students think of jobs in today's economy. Use the example of two of the jobs students suggest, for instance doctor and carpenter. Say that the two people have economic roles. The doctor's role is to provide the service of health care, and the carpenter's role is to make houses. Try to choose one job which provides a service and one which makes or sells goods.

Have students pair up at computers. Ideally, you should assign one of the four characters in "The Tobacco or Wheat Game" to students. Tell the students they will be playing a game similar to Monopoly -- the object is to earn the biggest fortune. They will be researching their characters to find out what each is likely to be able to do in order to earn money. Three of the characters are actual historical figures. The fourth, Jacob Hain is a fictional character based on a group of actual people. The choices are:

- **George Ellicott** was one of three brothers who came to Maryland from Pennsylvania to build a mill. He founded Ellicott City.
- **William Lux Bowley** was a merchant-captain who resided, when he wasn't at sea, at Elkridge Landing.

- **Charles Carroll** was a planter and financier who settled in what is now Howard County, Maryland.
- **Jacob Hain** is a fictional character based on German immigrant farmers who settled in what is now Northern Howard County, Maryland. These farmers came from the Rhine valley in Germany. They grew wheat in their homeland and continued to cultivate it when they immigrated to Maryland. Jacob Hain is the son of one of these immigrants.

Before students view the lesson on-line, go over the “Exploring Economies Worksheet.” On this worksheet, the students will record roles, and what each role provided for each category. The idea is to give students a way to keep a record of their observations of each economy. After the lesson is completed, facilitate comparisons of the economies of 1751, 1774 and today. Your students should be able to note that the two later economies are more complex and diverse than the economy of 1751. They should also note the absence, in today’s economy of a source of “free” labor: slaves. They may notice that the dependence on slaves in the wheat economy of 1774 is greatly reduced from the dependence on slaves in 1751.

Once the class has finished viewing the lesson and completing the worksheet, have students play “The Tobacco or Wheat Game.” This could be a whole class, teacher-directed activity, or it could take place with small groups of students at different times.

To play the game, students are assigned roles. The roles Jacob Hain and Charles Carroll are easiest to record. The roles William Lux Bowley and George Ellicott are hardest to record. You may want to assign roles accordingly. Students record a beginning amount of money for their character then read and follow the actions on the year cards. The game covers the years 1774 to 1780. Each character, in the year 1774, is instructed to record a starting amount on their ledger. Every time a character completes a transaction, they should write down the result of that transaction in the ledger. Players can “balance their books” at the end of each year. This will allow students to reflect on the change from a wheat economy to a tobacco economy as it occurs. If you choose to play the game as a teacher-directed activity, you may want to stop the group after each year and ask the class which character made the most money that year and why. You may also want to interject historical facts dealing with the American Revolution since the game covers that time.

### **Thoughtful Activity**

Using the worksheet entitled “Graphing Fortunes” have students compare the success of the characters in the game. Depending on your student’s experience in making line graphs, they may need more or less facilitation with this activity. They will need access to each other’s ledger sheets to complete these graphs. You should also supply them with graph paper.

Once the student’s graphs are complete, the worksheet prompts students to write about which character “won”, and support their choice by describing the graph. It is conceivable that students could make a reasonable argument for more than one character, although the character William Lux Bowley finishes with the most money. The students are also asked to write why the particular character they believe “won” was the most successful. In the course of this work, students should discover the answers to the following questions. These questions could be asked of students who do not know where to begin in considering the question “Who won?”

- How are the lines on graphs representing the fortunes of the characters the same?
- How are they different?
- What does the line look like that represents the character who earned the most money?
- What does the line look like that represents the character who earned the least money?
- What does the line look like that represents the character who increased his fortune the most?
- What does the line look like that represents the character who increased his fortune the least?
- Is the person who earned the most money also the person who increased his fortune the most?
- List the characters from least successful to most successful.

### **Thoughtful Activity Assessment Key**

An excellent response will include a graph with both horizontal and vertical axes labelled, using an appropriate scale for including the smallest amount of increase and the largest amount of increase, with all points plotted correctly. The paragraph about which character won will state the author’s choice and present evidence for the choice including a reference to the graph.

A good response will include a graph with correctly plotted points and an appropriate scale that may be lacking labels. The paragraph about which character won the game will state the author's choice and present evidence, but may not refer to the graph.

A fair response will include a graph which may be incorrectly plotted or be missing labels or use an inappropriate scale. The paragraph about which character won the game will state the author's choice but may not support the choice with appropriate evidence.

A poor response may be missing a graph or a paragraph. The graph will not be completed accurately. The paragraph will not include support of the author's choice of a winning character.

### **Children's Literature/Book References**

- *The Money Crop: Tobacco Culture in Clavert County, MD*. Eds. Sally V. McGrath and Patricia J. McGuire. Maryland Historical and Cultural Publications. Prince Frederick, Maryland. 1992. This is a picture book showing current cultivation techniques. The text is taken from interviews with tobacco farmers.

### **Other Resources on Wheat and Tobacco**

- *Patapsco: River of History*. . Tidewater Publication, Crisfield, Maryland.
- *Grist Mills in Baltimore County*. John McGrain. Baltimore County Library. 1972.

## Key to “Graphing Fortunes” Worksheet

Character: William Lux Bowley

Beginning Money:

<b>YEAR</b>	<b>ENDING TOTAL</b>	<b>INCREASE</b>
1774	1350	850
1775	6700	5350
1776	12700	6000
1777	20700	8000
1778	29800	9100
1779	38900	9100
1780	48000	9100

Character: Jacob Hain

Beginning Money:

<b>YEAR</b>	<b>ENDING TOTAL</b>	<b>INCREASE</b>
1774	100	100
1775	220	120
1776	360	140
1777	425	65
1778	585	160
1779	745	160
1780	925	160

Character: George Ellicott

Beginning Money:

<b>YEAR</b>	<b>ENDING TOTAL</b>	<b>INCREASE</b>
1774	5300	1300
1775	1840	-3460
1776	2940	1100
1777	3820	880
1778	7070	3250
1779	10320	3250
1780	13570	3250

Character: Charles Carrol  
Beginning Money:

<b>YEAR</b>	<b>ENDING TOTAL</b>	<b>INCREASE</b>
1774	12875	2875
1775	15750	2875
1776	16450	700
1777	16700	250
1778	16850	150
1779	17500	650
1780	18850	1350