From Food, Inc. to Farm Bill: Do Students Perceive the Nuances? Do Definitions Matter?

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Introduction

Many expressions have connotations, the secondary meaning, in addition to the primary meaning of a word. As the demographic complexion of our students in agricultural and environmental sciences continues to evolve, the degree of agricultural literacy also changes.

Identify This Implement

Connotation

Review of Literature- Literacy

- Limited agriculture knowledge among freshmen surveyed at West Virginia University including freshmen agriculture majors (Pfeifer, 2011)
- Freshmen surveyed at Texas State University- San Marcos scored only 50.39% on the Food and Fibers Systems Literacy student assessment for grades 9-12…raises concerns about voting, future policy makers, etc. on food and agriculture issues (Keith, 2007)
- Most positive impact of an introductory agricultural education course on agricultural literacy and perceptions of agriculture among urban secondary students was improved understanding of public policy (Riedel, 2006)

“Literacy” Implications

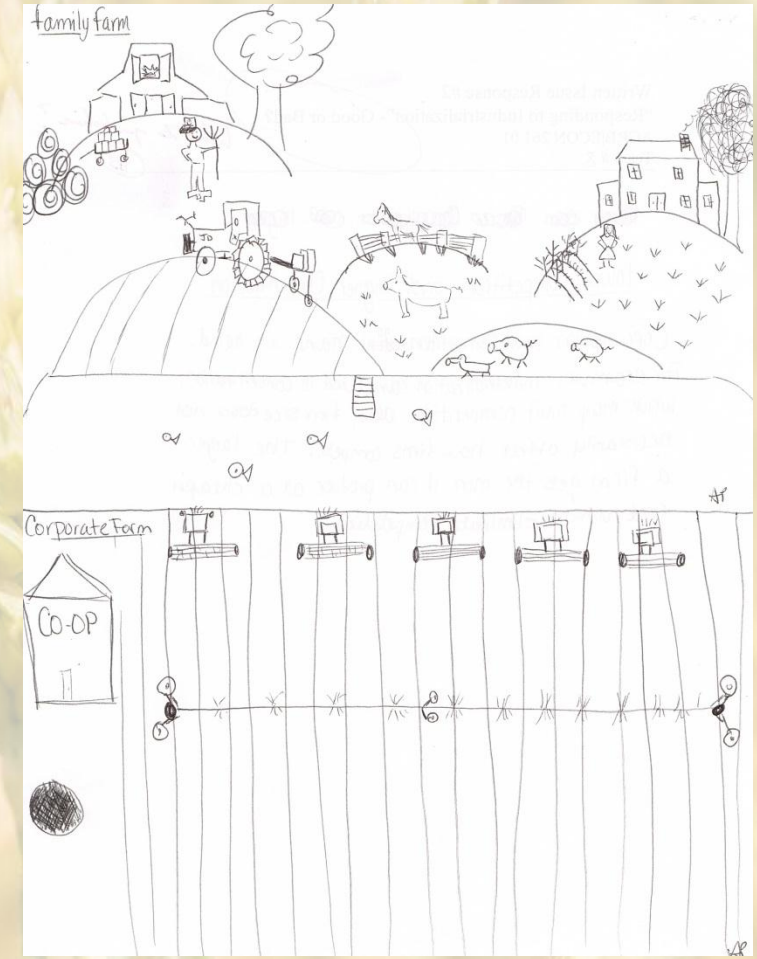
So, do concepts, does terminology, etc. have explicit, let alone implicit, meanings to today’s student or does the average student have any perception at all? Do they perceive the nuances?

Literature indicates NO!

Do Definitions Matter?

Definitions are critical. At one level, we define who we are through our core principles and objectives. At another level, definitions form the basis from which we operationalize our core principles, identify measurement opportunities, and illuminate the broader impacts of our conclusion. Definitions provide guidance for clarity of thought. (Hudson, 2011)

Classroom Epiphany



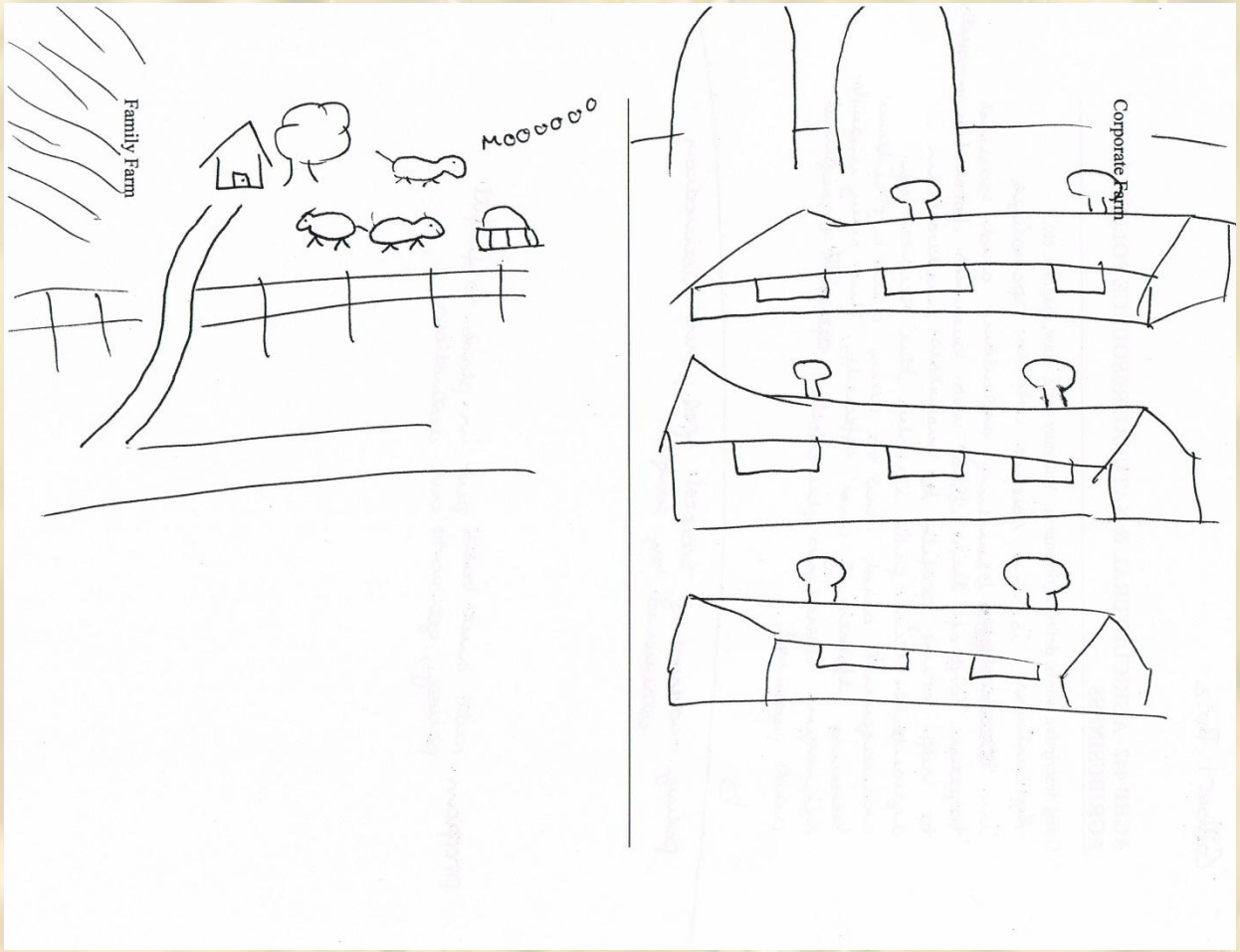
Drawing to Capture Conceptual Data

- It was fun…I liked drawing my thoughts. Focus group process with children (Yuen, 2004)
- Using drawings to gather data from children (Walker, 2007)
- Science teachers ability to draw what is inside the human body dependent on time taught and use of dissection. Could draw organs but not in relation to the organ systems (Patrick and Tunnicliffe, 2010)
- Limited applications in higher education

Pedagogical Process- First Stage

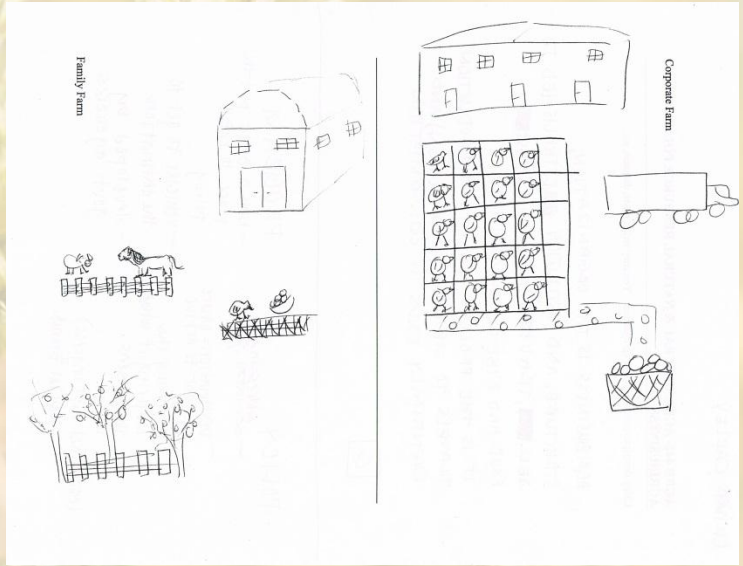
- 400-level agricultural and natural resource policy course
- Early semester exercise designed to gauge student understanding of the term agribusiness and specifically, family farm
- Students define agribusiness (narrative and Venn diagram), then the phrase, family farm, via drawing
- “Canvas” provided to depict (compare and contrast) a family farm and a corporate farm
- Students review peers’ illustrations, reflect and discuss

Results- 2012 Class Example



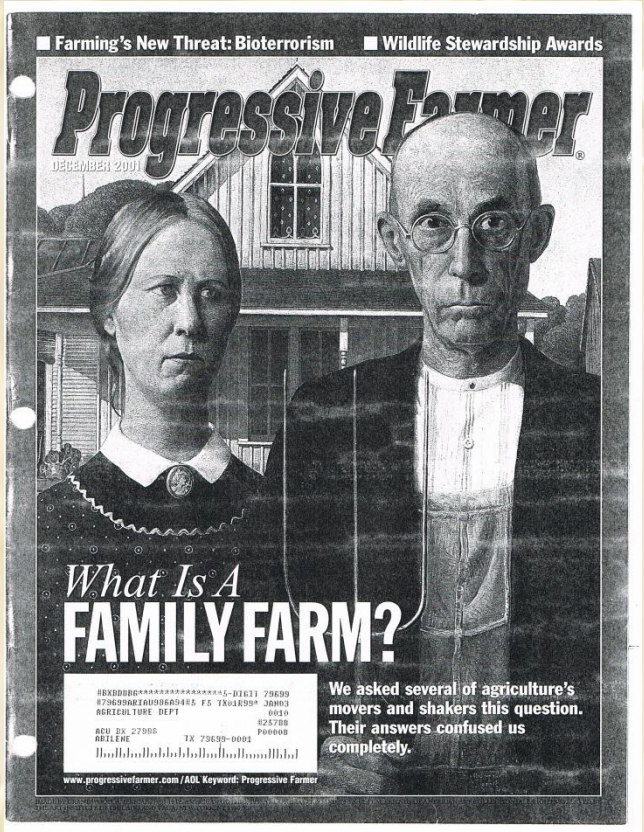
Results- General Observations

- 8-year period (n=62, avg ≈8 students/year)
- Pastoral v industrial
- Small v large
- Diversified v monoculture
- American Gothic image
- Distribution
  - 85.5% distinctly different
  - 12.9% some similarity
  - 1.6% congruent

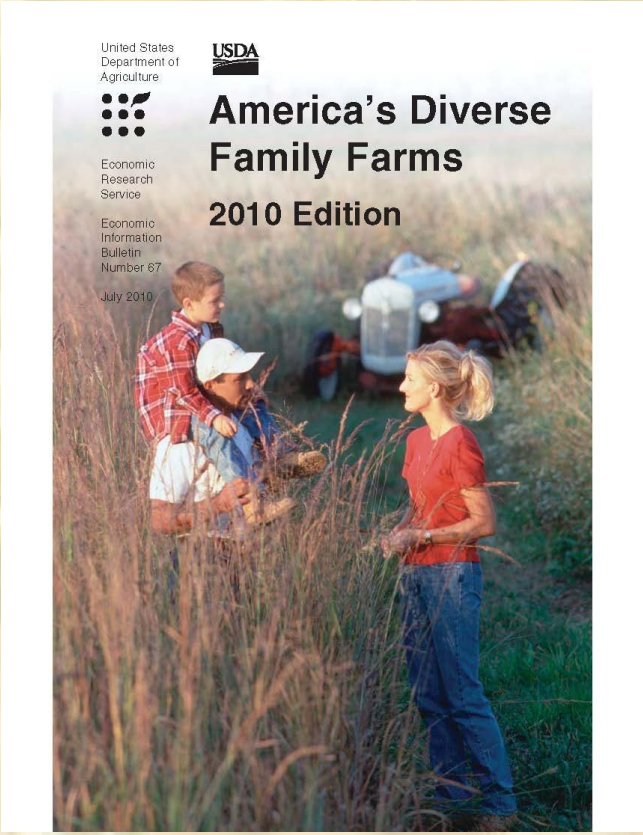


Pedagogical Process- Second Stage

Popular Press- Varied Views in Progressive Farmer

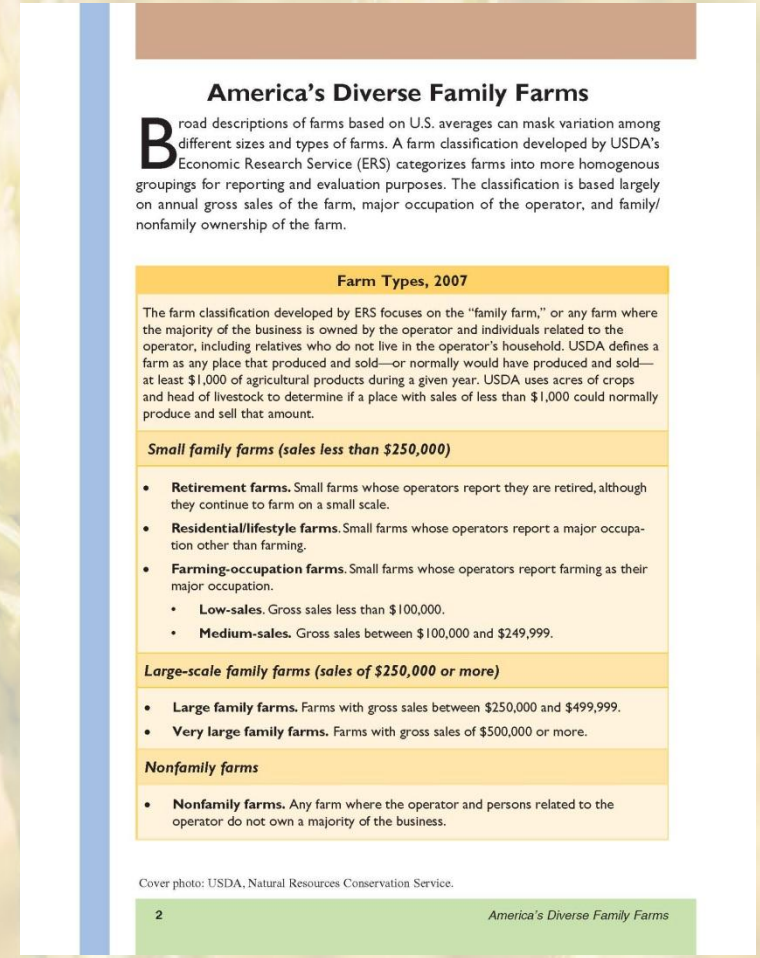


USDA-ERS, America's Diverse Family Farms



Second Stage- Approach

- Educational approach (Knutson, et al., 2007)
- Positive rather than normative approach, minimize bias
- Note differences (e.g., geographic)
- Reference- Census of Agriculture



America's Diverse Family Farms

Broad descriptions of farms based on U.S. averages can mask variation among different sizes and types of farms. A farm classification developed by USDA's Economic Research Service (ERS) categorizes farms into more homogenous groupings for reporting and evaluation purposes. The classification is based largely on annual gross sales of the farm, major occupation of the operator, and family/nonfamily ownership of the farm.

Farm Types, 2007

The farm classification developed by ERS focuses on the "family farm," or any farm where the majority of the business is owned by the operator and individuals related to the operator, including relatives who do not live in the operator's household. USDA defines a farm as any place that produced and sold—or normally would have produced and sold—at least $1,000 of agricultural products during a given year. USDA uses acres of crops and head of livestock to determine if a place with sales of less than $1,000 could normally produce and sell that amount.

Small family farms (sales less than $250,000)

- **Retirement farms.** Small farms whose operators report they are retired, although they continue to farm on a small scale.
- **Residential/lifestyle farms.** Small farms whose operators report a major occupation other than farming.
- **Farming-occupation farms.** Small farms whose operators report farming as their major occupation.
  - **Low-sales.** Gross sales less than $100,000.
  - **Medium-sales.** Gross sales between $100,000 and $249,999.

Large-scale family farms (sales of $250,000 or more)

- **Large family farms.** Farms with gross sales between $250,000 and $499,999.
- **Very large family farms.** Farms with gross sales of $500,000 or more.

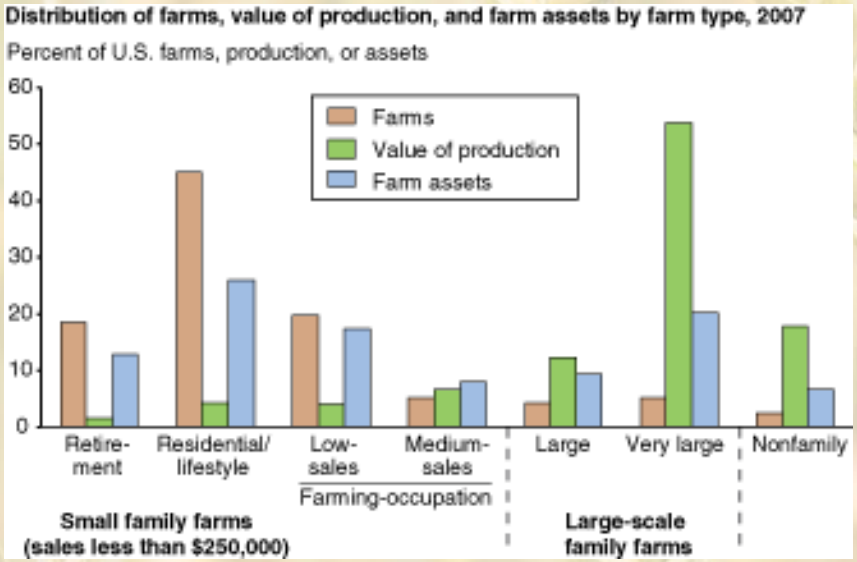
Nonfamily farms

- **Nonfamily farms.** Any farm where the operator and persons related to the operator do not own a majority of the business.

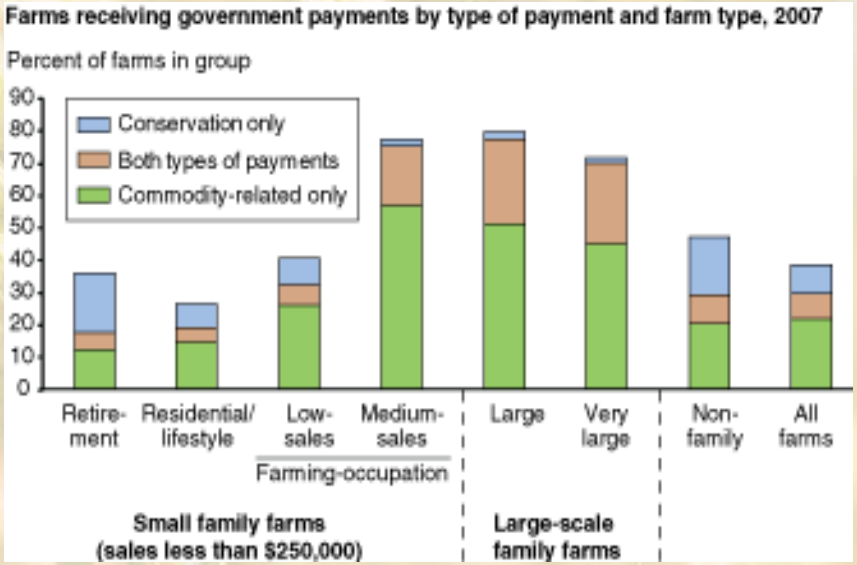
Cover photo: USDA, Natural Resources Conservation Service.

Second Stage- Examples

Farms, Production, Assets

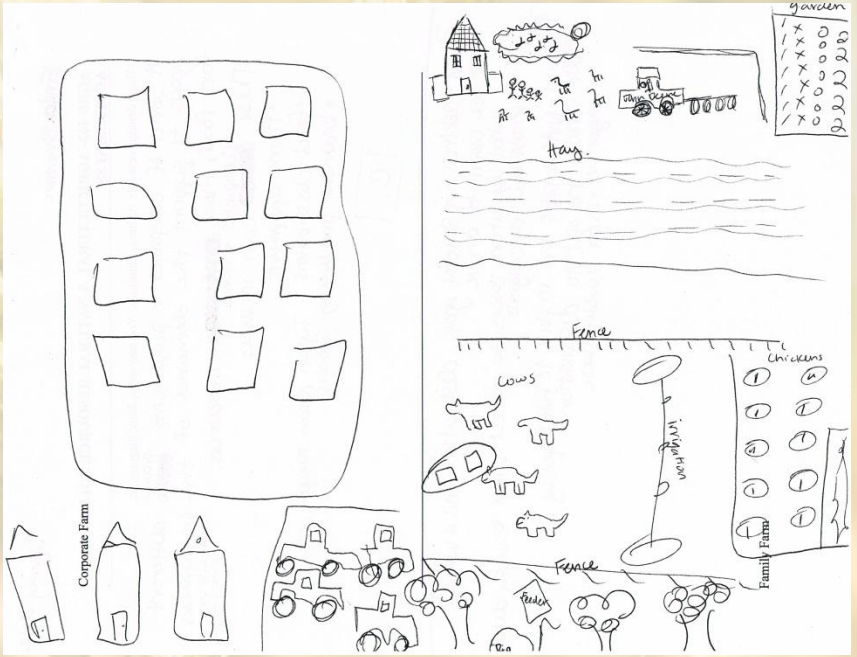


Government Payments



Summary and Implications

- Limited agricultural literacy
- Definitions matter
- Epiphany- illustrating understanding
- Pedagogical process
  - First stage (drawing, reflection and sharing)
  - Second stage (compare and contrast popular view with USDA-ERS classification system)
- Encourage reflection as semester begins- sets precedence
- Educational approach (i.e., “two sides to every story”)



Areas for Additional Inquiry

- Compare student perceptions at other universities
- Incorporate exercise (adjacent example)
- Reflective writing question

The Changing Production Sector

1) Using America's Diverse Family Farms 2010 Edition:
   a) My father is 76 years old. He retired from full-time farming fourteen years ago. He owns a 180 acre parcel of land. He receives government payments. Based on the data provided,
      i) Does the median income for his farm type classification fall above or below the median income of all U.S. households?
      ii) Is it more likely that my father receives payments from commodity-related payments or land-retirement payments?
      iii) Based on your answer to 1aii, approximately what percent of farms in this specific group receive some form of government subsidy payments?
      iv) In 1989, my father was in a general partnership with my uncle. My brother and cousin were also involved in the partnership. At that point, they were farming a total of 2200 acres. Assume they harvested cotton averaging 500 lbs/ac of lint with an average price of $0.50/lb from 1650 acres. The remaining acres were in various government set-aside programs. Excluding government payments and based only on sales, in which farm classification would they be classed?
   b) In 2007, large-scale family farms and non-family farms comprised about 13% of all farms, but accounted for this percent of the value of production?
   c) The largest portion of commodity related program payments go to
      i) Small family farms or large family farms?
      ii) Within the major category you chose in 1ci, which farm classification received almost 50% of these total payments?
   d) Read the attached editorial, *Land owners cash in with subsidies*. Based on the data provided in *America's Diverse Family Farms 2010 Edition*, how would you respond to his assertions (i.e., are they accurate based on the data)?

2) Choose a specific commodity in which you are interested.
   a) Search for a specific website devoted to grower issues? Note the URL.
   b) What is one major focus, issue, directive, etc. highlighted as currently important to this specific grower/commodity group?

3) Using the Census of Agriculture for 2007, find the following information for Taylor Co., TX.
   a) What is the market value of agricultural products sold- average per farm in dollars?
   b) What commodity group generates the largest number of dollars for Taylor County farmers?

Thank You