

Approved February 12, 1986  
Date

MINUTES OF THE HOUSE COMMITTEE ON EDUCATION

The meeting was called to order by Representative Don E. Crumbaker at  
Chairperson

3:38 ~~PM~~/p.m. on February 6, 1986 in room 519-S. of the Capitol.

All members were present except: Rep. Apt, Polson, Williams, Laird. All were excused.

Committee staff present:

Avis Swartzman, Revisor of Statute's Office  
Ben Barrett, Legislative Research  
Lynda Cory, Secretary to the Committee

Conferees appearing before the committee:

Steven D. Fisher, Director, Kansas Foundation for Agriculture in the Classroom  
Fran Parmley, Administrator, Kansas Foundation for Agriculture in the Classroom  
Dr. Jerry Horn, Associate Dean of the College of Education, Kansas State University  
Becky Vining, Assistant to Dr. Horn  
Loreen McMillan, Board of Agriculture  
Barbara Moyer, Kansas Farm Bureau  
Damon Slyter, State Department of Education

The Chairman introduced conferee Steven Fisher to the committee, who then presented to the committee material explaining the purposes and positive outcomes of having agriculture taught in the classroom. Out of 30 who applied last summer for the workshop, 20 teachers received training and conducted inservice in their own districts. This summer's workshop is scheduled June 9-20, is titled "Issues in Agriculture," and will have a \$250 stipend. (Attachment 1, 2)

After the presentation, a question and answer period ensued.

Meeting adjourned at 4:11 p.m.



STATEMENT TO THE HOUSE COMMITTEE ON AGRICULTURE AND LIVESTOCK

Representative Lloyd Polson, Chairman

by Steven D. Fisher, Chairman, Board of Directors  
Kansas Foundation for Agriculture in the Classroom

February 6, 1986

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Chairman Polson and members of the committee:

It is my privilege as the newly elected chairman of the Board of Directors of the Kansas Foundation for Agriculture in the Classroom to express our appreciation to the Kansas Legislature for their support during the past session.

We come before you today to share the accomplishments of the Foundation, and to request your continued support for the appropriation of the \$25,000.00 matching grant for the 1986-87 fiscal year. We are pleased that the Governor's budget did include this as a line item within the Department of Education.

The Foundation's existence has been short in tenure but dynamic in achievements. It was only in December of 1982 that a Kansas Task Force of 21 members was formed after a group of concerned Kansas agriculturalists and educators attended a regional meeting in Lincoln, Nebraska. This meeting, sponsored by the United States Department of Agriculture, was the first to make citizens aware of this movement. This initial group envisioned a plan for Kansas that would be solid, long range in nature, and of high quality. They soon realized the need for funding would be of critical concern, so on July 5, 1983, the Task Force became the Kansas Foundation for Agriculture in the Classroom as a not-for-profit corporation. The Foundation and Board of Directors met frequently that first year in charting the course and setting the goals for the organization. The major goal became reality when in June, 1984, 8 teachers, a university professor and a journalist worked three weeks to write a curriculum guide for K-12 teachers. The same teachers pilot tested this guide during the 1984-85 school year and revised it in March of 1985.

Creating an awareness and letting people know of our important work is an ongoing endeavor. So in October of 1984, one of the first expenditures was the purchase of a professional tabletop display that has been used dozens of times to tell the Ag in the Classroom story to agricultural, educational and other trade industry associations and groups as they meet across the state. In March of 1985, the National logo for Ag in the Classroom was modified by enclosing it with the outline of the State of Kansas and adopted as our official state logo. It is featured on the cover of your folder.

In April of 1985, contact was made with an Iowa educational firm to revise and tailor make a computer software program entitled Farm and Food Bytes. Presently, more than one hundred have been purchased and distributed for use in Kansas classrooms. A sophisticated new brochure to complete our fund raising efforts was also printed in April of 1985 and is included in your folder for review and consideration.

In May of 1985, the curriculum development efforts were completed when the

guide entitled, Integrating Agriculture into the Classroom, was printed. The quality of that guide is indicated in the November, 1985 issue of USDA Ag in Classroom notes, in the quote from Judy Carley, Secretary of Indiana Agricultural Awareness Council: "I am going to show the Council at our next meeting a copy of Kansas' curriculum guide hot off the press. It's an excellent example of a well-integrated curriculum guide that teachers can really use - things like agricultural math problems that fit into the math lesson we are teaching. Kansas did an excellent job. I consider it a model we want to follow for our guide." A materials catalog was also printed to supplement the curriculum guide so that teachers would have ready references where materials could be ordered.

Another major project of the Foundation that you will hear more about later was begun this past spring and concluded recently. A research project to assess the agricultural knowledge among Kansas 6th, 9th and 12th grade students was needed. We wanted to establish a base of agricultural knowledge among Kansas students so that we could be accountable to our funding sources as we help them understand the importance and need for this type of program.

The first two weeks of June 1985 saw the second major goal of the Foundation come into being. The first summer course for credit was held at Kansas State University in which 20 Kansas teachers attended and learned how to integrate agriculture into their classroom. The excitement and enthusiasm generated for agriculture and education during those two weeks were beyond our wildest imaginations. The testimony from the teachers included such statements as, "This was by far the best in-service training I have ever attended in my tenure as a classroom teacher in Kansas"; and "You really made learning about agriculture fun". Needless to say, those teachers have been our best ambassadors for promoting the course which will be offered again this coming summer.

By June 30, 1985, our treasurer had certified our fund raising efforts of \$21,000.00 towards the matching \$25,000.00 grant for the 1984-85 year. Thus, your \$21,000.00 effort was translated into a \$42,000.00 budget which allowed us to make important and significant accomplishments this past year. We feel we have been good stewards of these funds and request that the \$25,000.00 grant again be made available for our use on a matching basis for the 1986-87 year.

I would like to point out that these achievements have been made as a result of a very dedicated and hard working group of Foundation members and Board of Directors, including such distinguished members as your colleagues: Senator Don Montgomery, and Representative Jo Ann Pottorff. The support and assistance from the State Department of Education and the State Board of Agriculture as well as the colleges of Education and Agriculture at Kansas State University have been remarkable as well. In fact, our program was becoming so successful and growing so rapidly that many of us were beginning to realize that we were going to need some additional help in keeping the Foundation for Agriculture in the Classroom moving forward. Our second major goal this year has been in the hiring of a part-time staff person. At this time, I would like to introduce to you Fran Parmley, Administrator of the Kansas Foundation for Agriculture in the Classroom, to give you a brief overview of her position and of our arrangement with the Kansas State University College of Education.

**STATEMENT TO HOUSE COMMITTEE ON AGRICULTURE AND LIVESTOCK**

by Fran Parmley, Administrator

Kansas Foundation for Agriculture in the Classroom

Through a Memorandum of Understanding with Kansas State University, the Foundation is housed in the College of Education in Bluemont Hall and is provided office space as well as a staff person. As that staff person, I also work as the Assistant Director of the Center for Rural Education and Small Schools which is also located in the College of Education. This cooperative arrangement affords the Foundation the use of resources and services which would be costly indeed if purchased directly by the Foundation. The Rural Education Center where the Foundation is also located has two Apple Computers with printers and a word processing typewriter making the production of our Foundation newsletter, the multitude of written materials, and the computerized resource file for teacher use a relatively simple task. The College of Education media center provides expert graphic arts services at inexpensive rates making the production of educational and promotional materials, displays, brochures also very convenient. Although the Foundation pays for many of these services the rates are considerably lower. The close proximity to College of Education faculty has already provided many opportunities for working with pre-service teacher education classes. Being located on the K-State campus also makes it considerably easier and more convenient to consult and work cooperatively with faculty and researchers in the College of Agriculture as well.

(Testimony continued by Steven D. Fisher)

Our wish list for future Foundation projects continue to grow almost daily. I would like to share some of those projects with you specifically as I review projected goals for 1986. These goals are spelled out in detail in the written material that is included in your folder.

As we continue to make more people aware of the Kansas Foundation for Agriculture in the Classroom, we like to share the two major objectives of our program which are

1. To provide for Kansas students an understanding and appreciation of the food chain which is the foundation of human life.
2. To promote the well being of agriculture as a necessary forerunner to the well being of America.

(1986 Goals included in folder)

Because we are all interested in education and in agriculture, we thought you would enjoy the opportunity to hear a highlight report of the research project conducted this past semester to test the agriculture knowledge of Kansas 6th, 9th, and 12th grade students. I would like to call on Dr. Jerry Horn, Associate Dean of the College of Education, Kansas State University and Becky Vining, graduate student in that college, to present that report to you at this time.

(See attachment A in folder)

In addition to the pieces of material I have already called to your attention, your folder also contains a complete list of the members of our Kansas Foundation for Agriculture in the Classroom.

As you can see, we have been working hard toward the objectives of insuring a basic agricultural knowledge among Kansas students. We still have much work to do as reflected in our goals for the future. At this time, we would be happy to entertain questions that you might have regarding our past work or future plans.

Assessment of Agriculture Knowledge---Elementary, Junior High/  
Middle School and Senior High

Dr. Jerry Horn and Becky Vining

For House and Senate Agriculture and Education Committees

February 6, 1986

This agriculture knowledge assessment was conducted to find out what schoolchildren know about agriculture. The information gained will help the Kansas Foundation for Agriculture in the Classroom target needed materials to teachers and in the future possibly even evaluate progress that has been made.

The assessment was designed to measure students' awareness of agriculture in the world around them. Questions focused on the six Ag in the Classroom concepts. We wanted to find out their understanding of the science and economics of agriculture and themselves as consumer of agriculture. Only a few questions were about production agriculture.

The assessment questions were multiple choice and check all that apply. More than 40 elementary and secondary teachers, foundation members and Kansas State University agriculture and education faculty members reviewed the questions. The assessment was also pilot tested with Riley County senior high and elementary students.

A thorough computer search for literature and a check with the U.S. Department of Agriculture found that no assessment of agricultural knowledge like this has ever been done before, so we're excited to share these results with you and others.

With help from the State Department of Education, random lists of 35 classrooms each of elementary, junior high/middle school and senior high grades were generated. After getting permission from the principal, assessment forms were sent to teachers in September and October. A total of 2,016 student responses were analyzed.

The results are interesting. It's hard to generalize, but I'd say we certainly can't assume children know about agriculture just because they live in Kansas which is such an agricultural state.

Yes, most of the children did know that:  
 Kansas ranks first in wheat production,  
 corn is not imported to the U.S.,  
 meat is a primary source of protein, and  
 yogurt, cream cheese and eggnog are found in the supermarket's  
 dairy section.

But here are some responses from the 487 elementary  
 students--mostly sixth graders about 12 years old--that really  
 surprised me.

Which set of ingredients would most likely be found in margarine?

- |     |   |       |
|-----|---|-------|
| 1.  | skim milk, cultured cream and salt            | 50.9% |
| *2. | soybean oil, water, salt and whey             | 6.2%  |
| 3.  | soybean oil, onion, water and egg yolk        | 2.7%  |
| 4.  | bleached flour, water, vegetable oil and salt | 11.5% |
| 5.  | I don't know                                  | 28.7% |

In Kansas, wheat is usually harvested at what time of year?

- |     |              |       |
|-----|--------------|-------|
| 1.  | spring       | 21.4% |
| *2. | summer       | 30.2% |
| 3.  | fall         | 37.7% |
| 4.  | winter       | 2.7%  |
| 5.  | I don't know | 8.0%  |

Which cattle trail went from Mexico to Abilene, Kansas?

- |     |              |       |
|-----|--------------|-------|
| *1. | Chisholm     | 23.9% |
| 2.  | Oregon       | 23.1% |
| 3.  | Independence | 8.5%  |
| 4.  | Westward     | 4.3%  |
| 5.  | I don't know | 40.0% |

Wheat is a major ingredient in each of the following except -

- |     |                |       |
|-----|----------------|-------|
| 1.  | macaroni       | 44.0% |
| 2.  | hamburger buns | 11.1% |
| 3.  | pizza crust    | 7.4%  |
| *4. | tortilla chips | 23.3% |
| 5.  | I don't know   | 14.2% |



What percentage of the American people are farmers?

- |     |              |       |
|-----|--------------|-------|
| 1.  | 21 percent   | 31.3% |
| 2.  | 13 percent   | 21.2% |
| 3.  | 8 percent    | 13.0% |
| *4. | 3 percent    | 3.5%  |
| 5.  | I don't know | 31.1% |

Soviets spend about 34 percent of their total personal spending on food. Americans spend about how much of their on food?

- |     |              |       |
|-----|--------------|-------|
| 1.  | 32 percent   | 17.7% |
| 2.  | 48 percent   | 30.8% |
| 3.  | 4 percent    | 3.3%  |
| *4. | 13 percent   | 9.4%  |
| 5.  | I don't know | 38.9% |

The responses were also crosstabulated so we could compare differences between males and females, students who have never lived on a farm and those who had lived on farms, and students according to their current residences, such as farm, small town or large city.

Veal is the meat of young -  
cattle---small town 16.1%, large city 40.0%

Which set of ingredients would most likely be found in margarine?  
soybean oil, water, salt and whey---farm 19.3%, large city 2.2%

One American farmer produces enough food for about how many people?  
75---large city 15.3%, farm 15.8%

Over the past 50 years, the number of farms in the U.S. has -  
decreased---females 38.2%, males 49.8%

In Kansas, wheat is usually planted at what time of year?  
fall---lived on farm 39.3%, never lived on farm 24.3%

Which of the following food products is not normally imported to the United States?

corn---female 35.4%, male 46.4%

The junior and senior high students answered the same questions, but their responses were tabulated separately. The results were fairly similar.

Here are some examples of the 922 junior high responses that came primarily from eighth graders who are about 14 years old.

Export facilities handling a large amount of the commodities exported from Kansas are located in which one of the following cities?

- |                      |       |
|----------------------|-------|
| *1. Houston, Texas   | 11.7% |
| 2. Portland, Oregon  | 4.0%  |
| 3. Manhattan, Kansas | 21.8% |
| 4. Chicago, Illinois | 10.0% |
| 5. I don't know      | 52.3% |

An agricultural invention of 1831 that greatly improved the ease and speed of harvesting grain was Cyrus McCormick's -

- |                 |       |
|-----------------|-------|
| 1. plow         | 13.8% |
| 2. tractor      | 46.8% |
| *3. reaper      | 6.3%  |
| 4. disk         | 0.3%  |
| 5. I don't know | 32.8% |

Which of the following are products made from corn? (Check all that apply)

livestock feed---large city 67.3%, farm 83.3%

flour for white bread---large city 37.8%, farm 18.8%

Which of the following are practices to control soil erosion? (Check all that apply)

practicing minimum tillage---female 38.5%, male 48.0%

planting windbreaks---lived on farm 57.7%, never on farm 60.4%

In his research at Tuskegee Institute in Alabama, George Washington Carver made cheese, milk, coffee, flour, ink, dyes, soap, wood stains, linoleum and insulating boards from which one of the following plants?

peanut---male 29.5%, female 19.5%

What process kills bacteria in fluid such as milk with heat?  
pasteurization---large city 41.2%, farm 74.0%

The biggest threat to production agriculture in western Kansas in the future is -  
lack of water for irrigation---lived on farm 44.7%, never 35.9%

The 707 senior high respondents were mostly 11th graders nearly 18 years old.

In 1980 President Jimmy Carter enacted a grain embargo against what country?  
the Soviet Union---female 47.8%, male 71.5%

Which of the following are products made from corn? (Check all that apply).  
flour for white breads---large city 56.3%, farm 24.8%

Legumes, such as soybeans, peanuts and alfalfa, have nodules on their roots that trap -  
nitrogen---females 18.2%, males 37.7%

What is used in agriculture to transplant the hereditary material from one plant species to another to artificially pass on the best characteristics?  
gene splicing---lived on farm 48.1%, never lived on farm 40.4%

More than half of the U.S. Department of Agriculture's payments are used for which of the following?  
food stamps and nutrition programs---large city 12.5%, farm 2.8%

Many more facts and figures were gained through this assessment, but these examples have given you an idea of the important information this research has provided. We plan to make the results well known so everyone will realize that we can't take awareness of agriculture for granted.