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6th Grade Exploratory Curriculum for East Buchanan Community School District

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Developing a curriculum for Middle School Agriculture Education Exploratory at East
Buchanan Community School District

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Program of Study Committee:
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Table of Contents

Chapter 1	<i>Introduction</i> <i>Background Information</i> <i>Purpose</i> <i>Objectives</i>	Page 2
Chapter 2	<i>Literature Review</i>	Page 4
Chapter 3	<i>Methods and Procedures</i>	Page 5
Chapter 4	<i>East Buchanan Agricultural Department Middle School Exploratory Program</i>	Page 8
Chapter 5	<i>Summary</i> <i>Reflection on Creative Component</i> <i>Reflection on Graduate Program</i>	Page 9
References		Page 13

Chapter 1

Introduction

When I began teaching as a long term substitute at Jesup Community School District in the spring semester of 2013, I was not comfortable with what I should teach and how to teach it. Therefore, I taught what came to mind and hoped it was acceptable to the students, parents and administration. As I have become a seasoned teacher, I realized a need to have a carefully thought out plan. I have since refined my curriculum to fill the need of the students and community.

I moved to the East Buchanan Community School District in the fall trimester of 2015, I was tasked with teaching a sixth grade exploratory for six weeks. I had taught an eighth grade exploratory previously at Jesup but I had not settled on a set curriculum that I was satisfied with for the middle school exploratory program. Because of this, as I progressed through my Master's of Science degree program, I realized that a middle school exploratory curriculum should be my focus so I could meet the needs more adequately.

Background Information

As I did not have a set curriculum for my middle school exploratory classes during my first five and one half years of teaching, I knew I needed to upgrade the current offerings. In the past, I would direct my teaching towards what the students wanted to know about agriculture, catering it more on a class by class basis, instead of evaluating the needs of the community. I found this to not meet the needs of the class and prepare them for the high school setting thus a change was needed.

Presently in the East Buchanan Agricultural Education Program, there are two sections of classes per trimester, equaling a hex. Class sizes range from 18 to 25 students per class annually. The classes are six weeks long with 45 minutes of class time per school day.

Purpose

This creative component will serve as a guideline for developing a comprehensive agricultural middle school curriculum for 6th grade students at the East Buchanan Community School District. The focus for the curriculum is to assist students become more literate in agriculture so that students are educated consumers upon leaving the exploratory.

Objectives

The following objectives are to be obtained through this creative component:

1. Serve as a day to day guideline for the sixth grade agricultural education exploratory class.
2. Assist students in becoming educated consumers in relation to industries located in the East Buchanan Community School District and become a more rounded student.
3. Recruit students to elect themselves for agricultural education classes when they enter high school.

Chapter 2

Literature Review

There have been several studies completed regarding middle school exploratory programs. I focused on two specific studies for this creative component, “Program Needs of Middle School Agricultural Education Teachers: A Delphi Study by John Rayfield and Barry Croom” and “Developing a National Framework for a Middle School Agricultural Education Curriculum by Martin Frick.” In Rayfield and Croom’s article, it mentioned that FFA and Supervised Agricultural Experiences are an important part of a middle school agricultural program and that they could be the fun piece of the class that would entice students to take high school agricultural classes. While this could be true for some programs, I have to respectfully disagree. If the exploratory course is a full semester or trimester course, these each could be a short unit to gain some interests. In an exploratory classroom however, I feel that we should highlight things we learn about in the high school agricultural education curriculum. The FFA plays a supporting role in our classroom, very similar to SAE, and should not be the focus at the middle school level.

In the article written by Frick, he concluded that a core middle school curriculum includes four literacy subjects and six exploratory subjects. Due to the six week time constraints of the class at East Buchanan this is not possible. However, I agree with the idea that we need to have literacy and exploratory subjects in our teachings. I have detailed them in chapters 3 and 4 respectively.

Both of these articles I found very useful and both helped guide me in my planning of my curriculum for the sixth grade exploratory.

Chapter 3

Methods and Procedures

When I began developing a sixth grade exploratory curriculum for the East Buchanan Community School District, I was at a loss on where to begin. To assist me in my development, I looked at the community in which I serve, specifically my advisory committee, and what students should know to become more literate about the agriculture, not only our district but also in Iowa. I decided on the following units: Agricultural Literacy, Agricultural Careers, Animal Science, Plant Science, Agricultural Business and Current Agricultural Events.

Along with each unit, I utilized the National Agriculture, Food and Natural Resource Standards (AFNR).

To begin the course, I combined the first two units, Agricultural Literacy and Agricultural Careers, together under the same standard, *CS.02. Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.* To meet this standard I will have students utilize a pre-test and post-test, an infographic gallery walk and mind maps to demonstrate their knowledge of the role of agriculture, food and natural resources in society and the economy. Students will focus on various agricultural careers and the literacy of Iowa agriculture including the different sectors. This unit is meant to be more investigative and research based, thus promoting inquiry learning.

The second unit in the middle school course will be plant science. The standard I will target is, *PS.02. Apply principles of classification, plant anatomy, and plant*

physiology to plant production and management. Students will utilize demonstration, observation and lecture based practices and will learn about plant botany, propagation and flowers. Since the East Buchanan Community School District is building an new greenhouse, the students will have a chance, in this unit, to learn outside the traditional classroom. They will be taught with hands on learning which promotes experiential learning.

The third unit I will teach in this course is animal science. The standard I will prepare for is, *AS.06. Classify, evaluate and select animals based on anatomical and physiological characteristics.* To meet this standard, I will focus on lecture based learning, inquiry learning and friendly based competition. Students will learn the proper terminology for common livestock species in Iowa.

The fourth unit I will cover in this course is agriculture business. The standard I will be teaching towards is, *ABS.05: Use sales and marketing principles to accomplish AFNR business objectives.* To cover the standard, I will utilize lecture and demonstration methods. Students will first learn different methods of selling an item and then students will sell a product of their choice. This allows students to be creative in selling an item.

The last unit or my capstone unit will address current events in agriculture. The standard I will be focusing on is, *FPP.04. Explain the scope of the food industry and the historical and current developments of food product and processing.* To accomplish this standard, I will utilize collaboration and presentation methods. Students will work in small groups to tackle a current event and create a presentation to present to class.

Discussion will take place among the class after each presentation to answer any clarifying questions.

Chapter 4

East Buchanan Agricultural Department Middle School Exploratory Program

This creative component is designed to be mainly hands-on experiential learning. Two units are between one week and two weeks, while the others are approximately one week in length. The assignments will be graded on a pass/fail basis and students will be assessed on their completion of the objectives and standard for each unit. Please see artifact A for the complete proposed sixth grade agricultural exploratory curriculum for the East Buchanan Community School District.

Chapter 5

Summary

Completing this creative component and research has given me a new perspective on teaching middle school students. Sixth grade is an awkward age for students as they begin their journey through middle school and prepare for high school. As they progress through this journey they determine their area of focus. They are at various stages of maturity during this journey causing it to be difficult to instruct and direct them. This creative component has also helped me organize my thoughts and determine what standards and objectives, I want my middle school program to address and accomplish.

Reflection on Creative Component

This project has helped me be a better teacher for the upcoming year. For the first time, I have a real idea of where I want my exploratory program to go and what I want my students to come away learning. Also, I designed it so that if they choose to not continue to be a part of my classroom, they can still be an advocate for agriculture and make informed choices as a consumer. In chapter one, I mentioned three objectives for this project. I will explain how this project helped me meet these objectives.

1. Serve as a day to day guideline for the sixth grade agricultural education exploratory class.
 - a. This objective was completed by allowing me to create a day by day plan for my exploratory class. I have objectives for each day, how I want to obtain these objectives, essential questions for the day, strategies and a

materials list. This curriculum was designed to make the student better informed about the world of agriculture.

2. Assist students in becoming educated consumers in relation to industries located in the East Buchanan Community School District and become a more rounded student.

a. This objective has been met by allowing myself to cater to the community. Input was provided by local stakeholders and advisory committee members regarding what is important to the communities within the East Buchanan Community School District. I also have been able to capitalize on the literacy needs of my students and become effective decision makers when they are the everyday consumer.

3. Recruit students to elect themselves for agricultural education classes when they enter high school.

a. By creating my own curriculum, I catered to all different styles of learning. I also addressed points that were identified as important to agriculture while making it fun at the same time. This should allow me to recruit more students when they enroll in high school classes. The FFA component becomes important during the students' seventh and eighth grade years because I do not have exploratory with them. Therefore, they witness what my students do by observing their activities.

Reflection on Graduate Degree Program

Overall, I had a very rewarding graduate college experience. If I am being completely honest, I never thought I would pursue a master's degree being that school

was not always the easiest for me. However, I found that I use my time wisely and focus, I can meet all the requirements. I also found that I have a passion for teaching agriculture and there is always room for improvement and learning including adding to my arsenal of teaching techniques.

One class that I found beneficial at Iowa State University within the Graduate College of Agriculture and Life Sciences would have to be AgEds 510: Research in Agricultural Education. This class was very challenging for me because, at first, I struggled to understand how research could be of use to me as I had no interest in pursuing a doctorate degree. Upon completion however, I realized that I can always learn from research and become a better teacher. I also found it helpful how to write research proposals. I now use this model for my students as they prepare to conduct their own research in my biology classes. For example, when I ask students to create their own projects, they use the same model to prepare each experiment.

Another class that I found beneficial was AgEds 511: Presentations for Agricultural Audiences. This class caused me to reflect on my teaching styles and get back to basics on how to really plan for my lessons. After teaching five and one-half years, I found myself settling into a routine and not thinking of different ways to teach my students so I tend to implement the same practice daily. For instance, in the demonstration portion, I would give the students directions and read them to the class instead of showing them. Little things such as this make a big difference.

A third beneficial course that I took would be AgEds 561: Technology Transfer and the Role of Agricultural and Extension Education. This helped me think outside the box of how technology can be implemented inside agricultural education. In addition,

this class helped me realize the potential of working with the local county extension. That partnership would be greatly beneficial for all age groups involved in education. For example, after taking this course, I now work with my county extension in helping plan a farm safety day for elementary students in Buchanan County.

A fourth beneficial class is AgEds 550: Foundations of Agricultural Education. This course helped me develop a deeper understanding of how important agricultural education is to the communities and students we serve. This course also helped me discover the agricultural education origin story and also how to work on a group project with others via the web.

I would highly recommend any other student thinking about pursuing a Master's of Science degree in Agricultural Education to do so. I would have nothing but great things to say about my committee, the College of Agriculture and Life Sciences and the staff at Iowa State University. With everyone's support, anyone can succeed.

References

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