

**House and Senate Education Committees
Joint Meeting
Wednesday, January 30, 2013**

Dr. Deborah J. Hamm, Superintendent of Newton USD 373
Natise Vogt, Principal of Walton Rural Life Center

Project Based Learning

On behalf of the students, teachers, parents, and Newton Board of Education members I would like to express our appreciation for the opportunity to speak on their behalf regarding project-based learning.

We live in a world that is driven by projects to complete and problems to solve. Seldom, if ever, does an employer ask an employee to read chapter 1 and answer the questions at the end of the chapter. In today's world and in the world of tomorrow, our students must be able to respond to an employer's request for action in creating a product or solving a company problem by utilizing strong critical thinking skills, being able to collaborate with other members of the work team, thinking creatively to suggest and examine unproven solutions, and to communicate effectively orally or in written form the results of the work task.

Project-based learning in the classroom provides students with opportunities to master skills necessary for the world of work in a low-risk environment. This model for teaching and learning focuses students' attention on the learning through the presentation of a real-world problem or project. There is real purpose for the learning. This is active, engaged learning where students learn by doing.

The benefits of project-based learning have been researched and include an increase in academic achievement, an increase in the application and retention of information, an increase in student engagement and motivation, and the development of critical thinking, communication, and collaboration skills.

So, how have those benefits been manifested at Walton Rural Life Center? Using the past measurement of student achievement, Walton students perform as well or better on state assessments than other USD 373 students that are not experiencing project-based learning on a consistent basis. We believe the achievement of these students goes beyond a performance level on a state assessment that measures a very narrow set of skills. These students utilize their skills to address problems posed by teachers and ones that they determine are important – this achievement is not measured by the state assessment.

When observing our students engage with a wide variety of adults – State Senators, New Zealand education officials, and community members that just drop in – I have observed a high level of retention of content knowledge and an ability of students to take the information that they have learned to apply in a different setting. This is not measured on a state or national assessment.

We know that student engagement is critical to student learning. Walk into any classroom at Walton Rural Life Center and you will see engaged learners. Study the data on school attendance and tardies and you will see a decrease in the amount of time students miss school. Ask students if they enjoy learning and are excited about the work that they are doing and they will give you a resounding yes. This is not measured on a state or national assessment.

Students at Walton Rural Life Center have regular opportunities to learn from experts in agriculture and share what they learn with real audiences from parents and community members to international visitors. They use critical thinking skills to answer their questions or questions posed to them. They investigate and research. Students collaborate with peers, teachers, and farm partners. Once they have found an answer – right or wrong – they communicate their findings to a small or large audience. They develop strong communication skills and have the confidence to deliver the message no matter the size or age of the audience. This is not measured on a state or national assessment.

You might be asking yourself: If this is so good, why aren't we doing more of this? We are hopeful that more schools in Kansas will be encouraged to teach through project-based learning now that our standards are changing. While we have experienced student achievement success through project-based learning, some educators might have been reluctant to try teaching with this model because of the high-stakes nature of the testing. We chose this model. No one mandated it. No one legislated it. We researched it and decided that it would work for us. Our parents decided that it would work for their children and have supported our learning a new model and changing the way that we do things. We must also acknowledge that our success is based in the commitment and dedication of our staff and the partnerships we have formed with our community.

Natise Vogt, Principal of Walton Rural Life, has been the instructional leader of the school since the school developed its new vision and she will share some examples of how the project-based learning model is used across grade levels.

We thank you for the opportunity to share with you today.

Respectfully submitted,

Deborah J. Hamm, Ed. D.



Walton Rural Life Center

PROBING QUESTIONS


<ul style="list-style-type: none"> ▪ Is ... ▪ Driven by open-ended questions ▪ Expecting students to know essential skills and content ▪ Based in inquiry ▪ Focused on 21st Century Skills ▪ An opportunity for student choice and voice ▪ Requiring feedback and reflection ▪ Requiring students to share learning through product or performance 	<ul style="list-style-type: none"> ▪ Is not ... ▪ Driven by a delta ▪ Rote memorization of facts ▪ Transmission of knowledge ▪ Focused on content knowledge without application ▪ "Do it this way and it should look like this." ▪ Only assessed by the teacher with a red pen. ▪ Taking a test at the end of a unit or chapter and then not using that information again
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Walton Rural Life Center

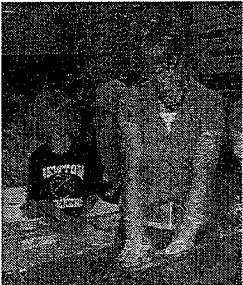
- One of five USD 373 elementary schools
- Located in Walton, Kansas – Population 300
- 167 students
- 8 classrooms for kindergarten through grade 4
- Learning lab
- Multiple gardens
- Chicken coop
- Barn
- Wind turbine

Student Driven Projects

- Engage students in learning and provide a reason to learn
- Increase excitement and set the stage for "just in time" learning




Engaged Learners



- Utilizing problem-solving skills
- Asking questions
- Researching
- Verifying
- Field testing

Designing PBL

- Start with the Project or Problem Idea
- Decide on Plan
- Gather Resources
- Conduct Fieldwork
- Present Findings or Results
- Use Authentic Assessment

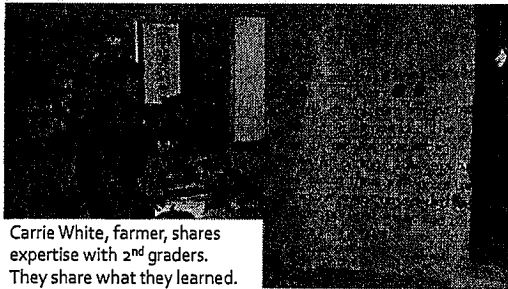


Examples of PBL

- Topic: Chickens
 - How many chickens will hatch?
 - The chickens have hatched – now what?
- Teacher led plan moving to student led planning
- Feeding and caring for chickens
- Chickens as a business!



Inviting Rural Experts




Carrie White, farmer, shares expertise with 2nd graders. They share what they learned.

Hi! Mrs. Schill's class

- Hello, Mrs. Schill's 2nd Graders at Walton Rural Life!
- This is the AmeriCorps NCCC team Raven 4 at Kayam Farm near the city of Baltimore. We heard about the similarities between the farm we work on and your school...we hope you can tell us about your school...



Ah say, ah say, Boy! What kind of chicken is that?




Hi, Heather,

We think your chickens are White Plymouth Rock chickens...the juveniles might be an Opington-Buff or a Buff Wyandotte... The dark one, a Leghorn-Singie Comb Dark Brown. The others, a Rhode Island Red and a Buckeye... How did we do at identifying them?

Our chickens are Silver Laced Wyandotte, Golden Laced Wyandotte, Barred Plymouth Rock and Americana breeds.

Your New Friends,
Kerzi and Anna

Chickens and goats and sheep, oh my!




Hi Farm Friend, Morgan!

Our chicken coop has nesting boxes, a fenced area... and a little door for them to go in and out of... The perimeter of the coop is 40 feet and the perimeter of the fenced area is 73 feet.

Pete the goat's fenced area is 86 feet around. He stays outside most his to stand under when it rains... Pete does not like rain!

Sincerely,
Kolby and Alex

If a tree falls... How many are left?

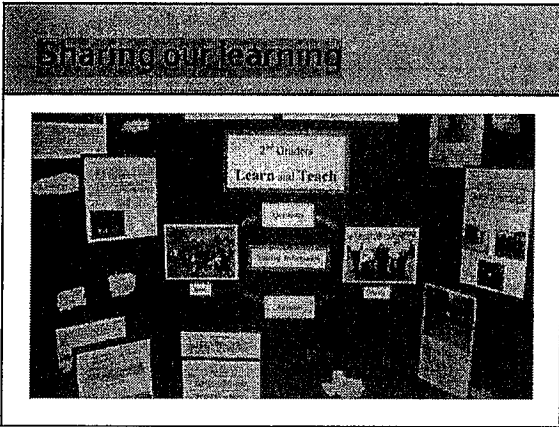


...Excellent job on the last questions! Here are some harder ones involving 3-digit numbers:

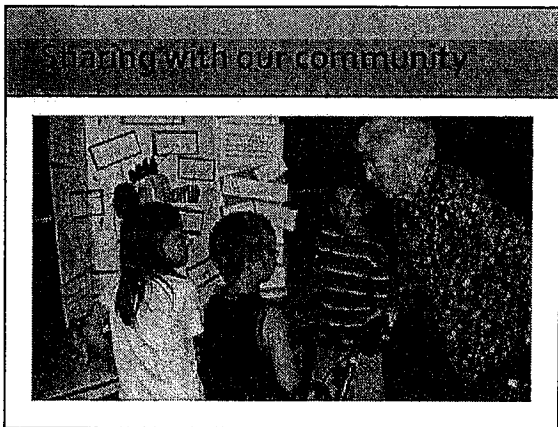
Here at Kayan farm, we planted 316 trees... 114 the next hickory... How many hickory trees did we plant?

Right now, we have 57 adult chickens... With more coming... and each laid one egg per day, how many eggs would there be after three days?

Sincerely,
Hannah







Resources

Project-based Learning with Young Children
by Deborah Diffily and Charlotte Sassman

Problem-Based Learning for Math and Science
by Diane L. Ronis

The Project Approach
by Sylvia C. Chard, PhD

How to use Problem-Based Learning in the Classroom
by Robert Delisle

Thank you for this opportunity!

Questions?
