

Project Based Learning The Barns of J.T. Wells & Sons

Created by
Katie Andres & Anne Clancy

A Project Based Learning experience
focused on preserving and protecting
the barns designed and constructed by
John Talcott Wells Sr. & his sons .

For Use by Elementary and Middle School Educators



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PROJECT RATIONALE & BACKGROUND

Long ago, Wells barns stood sentinel over surrounding fields, constructed with clear purpose. Quietly, and without fanfare, these vital structures played an integral role in securing the harvest, protecting livestock, and housing farming equipment. Today, due in part to the shifting agricultural landscape, many of these barns have lost their original purpose and fallen into disrepair. The current obsolescence of the barns still standing sadly supersedes the innovation that allowed for increased agricultural efficiency during the early 20th century and the role these structures played in the lives of the farming families that owned them.

Of the 46 documented, remaining traditional Wells truss barns built by J.T. Wells and his sons, two barns stand in Genesee County, nine barns stand in Livingston County, thirty barns stand in Monroe County, one barn stands in Seneca County, two barns stand in Washington County, and two barns have been relocated to Wyoming County. However, many New Yorkers are unfamiliar with these barns and are unable to identify the elements that constitute a Wells barn.



With today's emphasis on science, technology, engineering, art and math (S.T.E.A.M.) curricula in the classroom, Wells barns present an ideal case study for educators and their students. How J.T. Wells, Sr. acquired the knowledge that would have been necessary to design the intricate structures he built remains mostly a mystery. Archival records indicate the only formal education he received was through the eighth grade at the local Garbutt #3 school. Regardless, J.T. Wells, Sr. recognized a need and created a design to solve the problem – a real-world model for Career and Technical Education (CTE) teachers and other educators promoting Project Based Learning (PBL) in the classroom.

Created in conjunction with the upcoming release of the independent television documentary entitled *Still Standing: The Barns of J.T. Wells & Sons*, friends, barn lovers and former co-workers Katie Andres and Anne Clancy teamed up to create this Project Based Learning experience for upper elementary and middle school educators and their inquisitive students.

INTERACTIVE READ-ALOUD: *BARN* BY DEBBY ATWELL

Read *Barn*, Debby Atwell's historical fiction picture book aloud to students in a comfortable, whole-group setting.

Told from the barn's perspective, Atwell's story humanizes the structure's loss of purpose over a 200-year span of time.

While reading the story aloud, pause occasionally and selectively using key parts of the story as a springboard for conversation.

Encourage students think about, talk about, and respond to the barn's story as a whole group, in pairs, or in small groups.

INTERACTIVE READ-ALOUD STRUCTURE AT-A-GLANCE:



- 📖 Introduce the text
- 📖 Read the text
- 📖 Discuss the text
- 📖 Revisit the text at a later time (optional)
- 📖 Respond to the text (optional)

Bibliographic information

Title	Barn
Author	Debby Atwell
Publisher	Demco Media, 2001
ISBN	0606225854, 9780606225854
Subjects	Juvenile Nonfiction>History>Europe



Preview *Barn* via Google Books

SMALL GROUP RESEARCH

For two centuries, a barn witnesses history unfold, taking on varied roles and responsibilities throughout the years until it comes close to losing its purpose altogether. The chronological progression of Atwell's historical fiction story naturally lends itself to authentic, small group research opportunities, affording students the chance to learn more about several major events in the story including the American Revolution, the Great Depression, the Vietnam War, and more.



Small Group Research Activities:

- 📌 Task #1: Finding the Barn's Location
- 📌 Task #2: Determining When the Barn Was Built
- 📌 Task #3: Determining the Barn's Original Purpose
- 📌 Task #4: How the Great Depression Impacted the Barn
- 📌 Task #5: The Role of the Farm and Barn During World War II

Materials Needed:

- 📌 Internet Access
- 📌 1:1 Digital Devices
- 📌 1 Pencil per Student
- 📌 4-5 Research Packets per Small Group
- 📌 1 Print Copy of *Barn* by Debby Atwell

Allotting time for small group research empowers students in each group to serve as content “experts” regarding a specific time period within the barn's lifetime.

After small group research has concluded, invite representatives from each group to share and present information learned through the research process to the larger group.

RETAINING RELEVANCE IN A CHANGING WORLD

Starting out life as a “plain old farm barn” sheltering animals and crops in an agricultural role, the barn’s purpose changes over time. After playing a central role in the life of the family that constructed it, the barn is relegated to a supporting role over time by the owners that follow. Although the structure manages to adapt and to adjust to societal changes, its relevance dwindles until it is accidentally burned to the ground. Miraculously, the barn rises from the ashes like a phoenix in the story when its owners commit to rebuilding it. Sadly, this is not the case for most barns in real life.






While working in small groups to complete tasks #1-#5, the students will grow knowledgeable about the barn’s role during a specific segment of time. This part of the Project Based Learning experience marks an opportunity to deepen the students’ understanding of the barn’s role over the span of its entire lifetime time by focusing their attention on some of the barn’s non-agricultural uses.

ACTIVITY:

EXPLORING THE BARN’S EVOLVING PURPOSE OVER ITS LIFETIME



MATERIALS NEEDED:

-  Internet Access
-  1 Activity Packet per Student
-  1:1 Digital Devices
-  1 Pencil per Student
-  1 Print Copy of *Barn* by Debby Atwell per table group

WELLS BARN DESIGN & CONSTRUCTION

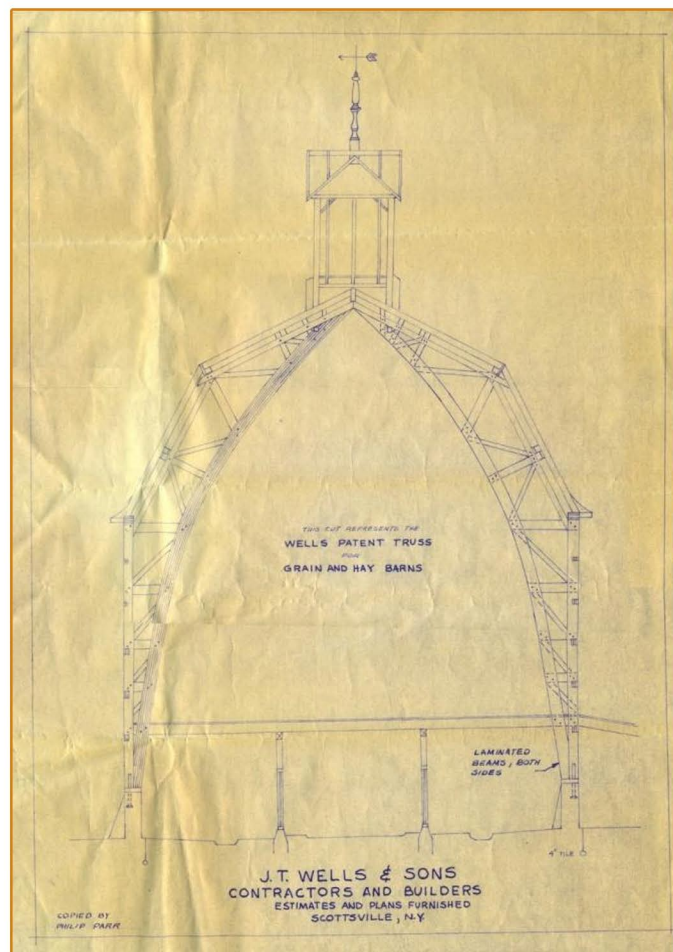
After analyzing the story of a fictional barn, this Project Based Learning experience will invite students to apply their knowledge and understanding to the current plight of barns in their own community.

Long before expressways, interstates, and the New York State Thruway sliced through the Rochester region, farms and fields reigned.

Historically significant in terms of their agricultural origins and their architectural artistry, Wells barns stand as physical testaments to the ingenuity of the master and family that built them.

The legacy of barn builders J.T. Wells & Sons punctuates our local landscape - a testament to agriculture's central role in our region's history. However, driving past barns like these on a daily basis, those who pass by can be lulled into a false sense of security that such structures will always stand tall. Once a barn's roof is ripped off and its beams are exposed to weather and the elements, its situation becomes critical.

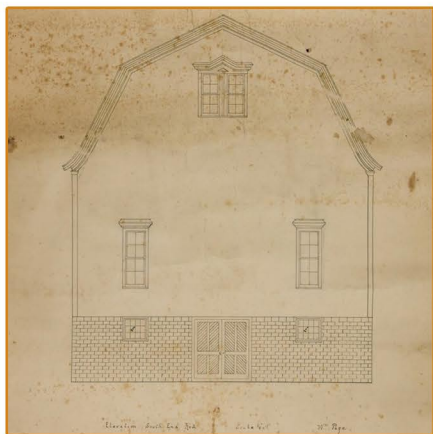
Wells barns that once stood sentinel over surrounding fields have lost their original function and fallen into disrepair. Helping students recognize and identify these physical structures marks an important first step in reenvisioning new purposes for them.



Promotional Poster of J.T. Wells & Sons Contractors and Builders
(Photo Courtesy of Brian Minster's Archival Collection)

WELLS BARN ELEMENTS

All Wells barns are gambrel-roofed barns. Most, but not all Wells barns feature a set of multi-paned windows crowned by a molding referred to as a “Lazy W” in the end of each gable.



Wells Barn Image Provided Courtesy of David Engdahl's Archival Collection



Detail of Lazy W Moldings Courtesy of Dick Thomas Photography



Several documented Wells barns lack “Lazy W” windows. Therefore, definite identification of a Wells barn can only be made from the inside.



*Thornell-Bruner Barn, Built 1894, Pittsford
Photo Courtesy of Dick Thomas Photography*

Inside, their hallmark Gothic arches combine form and function.



*Dempsey-Webb Barn, Built 1916, Wheatland
Photo Courtesy of Dick Thomas Photography*

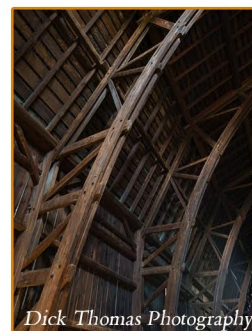
A key part of John Talcott Wells' design incorporated laminated trusses.



Dick Thomas Photography



Dick Thomas Photography



Dick Thomas Photography

Wells Trusses can be described as “laminated,” or containing several smaller pieces of lumber affixed together to form a solid beam. Most Wells barn trusses feature 5-7 laminated layers.

WELLS BARN CASE STUDY

Located at 206 Fisher Road, sandwiched between the Wegmans Corporate Complex and the airfields of the Frederick Douglass Greater Rochester International Airport, this barn sits between a proverbial “rock and a hard place.” Archival information, however, indicates that this wasn’t always the case.

Purchased in 1865 by Sister Superior Hieronymo O’Brien, a Catholic nun central to the founding of St. Mary’s Hospital, this once prosperous farm encompassed 225 acres at its height and produced fresh milk, butter, eggs, fruits and vegetables for hospital patients.

Today, all that remains of Lyman Farm is a parcel of land whittled down to 1.7 acres with two connecting barns, one of which is a Wells barn, struggling to shoulder the heavy weight of the tie connecting it to the farm’s earlier prominence.

With its real-life situation mirroring the status of the fictional barn in Atwell’s book, the Wells barn on Fisher Road provides a powerful case study for students and their teachers.



Materials Needed:

- 📌 Internet Access
- 📌 1:1 Digital Devices
- 📌 1 Case Study Packet per Student
- 📌 1 Pencil per Student

CULMINATING S.T.E.A.M. PROJECT

Display or copy and distribute page 6, “Wells Barn Elements,” from this educator guide to share with students. Explore the semi-signature exterior elements and signature interior elements of Wells barns with students.

Then, co-view the [Project Based Learning video](#) with the students. Serving as a call to action, the end of the video poses the following question: “Who has the creativity, the ingenuity, and the ability to reenvision new roles for the Wells barns that remain still standing? Do you?”

After viewing the video, re-visit how several Wells barns have been creatively adapted and repurposed into:

- event venues
- homes
- a climbing gym

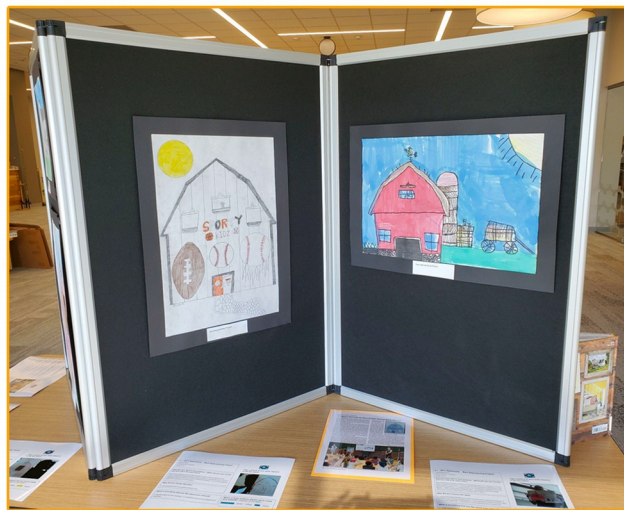
Discuss these adaptive reuse scenarios with students, encouraging them to consider how the open, soaring interior space of a Wells barn can suit all different kinds of purposes.

Then, invite students to brainstorm possible new uses for the Wells barn on Fisher Road and to select their favorite idea as the basis for a culminating art activity.

Provide students with tagboard barn templates as tracers or rulers and pencils to measure, draw, and create the outline of a Wells barn incorporating a gambrel roofline and a double set of windows crowned by a “Lazy W” molding.



Allowing students choice in their use of artistic mediums allows for creativity and individuality.

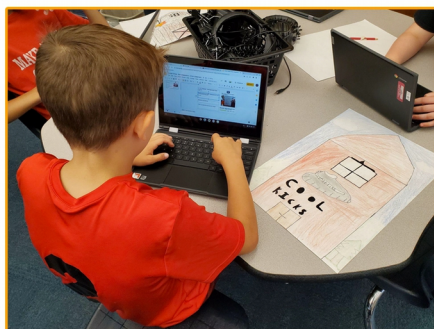


SELF REFLECTION OPPORTUNITY

With behind-the-scenes knowledge of the artistry that J.T. Wells, Sr. and his sons put into the barn-building process gained through their participation in this Project Based Learning experience, students will never look at a Wells barn the same way.

Similarly, in a world that emphasizes products and outcomes, it is important to help young artists recognize the value in and the importance of the artistic process.

Reflection helps students understand the roles the research phase and the planning phase contribute to the successful execution of a piece of work. An understanding of the artistic process allows for student growth and learning and encourages an authentic presentation of work and self.



Sample Artist's Statement: Educators can show this finished example to students as a model before students begin working on their own statements.

Blank Artist's Statement Template: Educators can create a copy of this blank template, add it to their Google Drives, and create copies of this Google Slides document for their students to complete individually via Google Classroom.

SCHOOL / COMMUNITY PARTNERSHIP OPPORTUNITY

Educators Katie Andres and Anne Clancy worked closely with Jeff Baker, Director of the Chili Public Library, to feature the students' artwork as a community display.

Partnering with the local public library not only validated the students' efforts, this partnership positioned the students as barn advocates for a barn in their own community.

The students' completed artist statements accompanied their artwork, providing behind-the-scenes insight into their creative processes for library visitors.

Educators implementing this Project Based Learning experience are encouraged to seek out partnerships with public libraries or other like-minded community organizations to raise awareness of student participation and to increase opportunities for civic engagement.

