# Quilting Across The Curriculum 

Juanita S. Johnson

## INTRODUCTION

In order to prepare students to embrace the $21^{\text {st }}$ Century with knowledge and understanding, teachers must stimulate creativity. Obsolete teaching methods need to be updated in keeping with the technological advances and with current needs. Many of the curriculum materials available today were developed prior to our current evaluative measures. Newer curriculum materials, teaching strategies, classroom projects and activities are imminently necessary if we are to continue to effectively prepare productive students.

Students are constantly under pressure to score well on a variety of tests. While some experience anxieties, others find it increasingly difficult to remember (memorize) information that they have previously learned successfully in a regular classroom setting. Whereas many courses teach test preparation strategies along with content, students exhibit confidence when they have utilized their testing skills in a variety of disciplines. When students utilize their creativity during the testing process, all of the required course content material can be brought back to memory. The interdisciplinary approach enables students to creatively utilize numerous skills to successfully complete these tasks.

Human Services and Consumer Sciences, formally Home Economics, is undergoing major changes as we embark upon this millennium. Early Home Economics pioneers were continuously seeking ways to enhance the current living conditions. Prior the $20^{\text {th }}$ Century, many Home Economics teachers limited their teaching to the traditional content areas of foods, clothing, and child care. In many instances, these content areas basically attracted average and low performing students which sent the message that exceptional or high performing students had no need for the material being taught. In our current educational system, teachers, counselors, and administrators should be concerned and committed to the development of the whole child thereby embracing the opportunity to integrate Personal and Family Development (previously called Home Economics or Homemaking) related subject matter into the total curriculum.

In Marjorie East's book, Home Economics: Past, Present, and Future (1980), home economics is described as both an area of study or a discipline and as a group of related occupations or a profession. According to East, the founders of the field of home economics, in the early part of the twentieth century, were influenced by a number of professional, disciplinary, and philosophical models. One predominant model emphasized the application of science for improving the near environment of the individual and family. They reasoned that if science could be applied to everyday life so
that the environments where individuals grew, lived, and worked were improved, then the quality of life of the individuals and families would be improved. (1)

Over the past few years, the field of Home Economics has received less than rave reviews, however all of their content areas have enjoyed increased public interest. This indication is due in past to the apathetic attitude of past and current home economists. The time has come to thoroughly convince our public, parents, administrators, counselors and all who pride themselves in shaping the minds of today's youth, that Family and Consumer Science Courses are those that should be included among the requirements of all high school students.

Dr. E.D. Hirsh, Jr. discusses cross-curricular teaching by stating that the progressive theory whereby students should gain knowledge through a limited number of projects instead of by taking courses in separate subjects is based on the following reasoning. If students learn facts in separate, academic courses they will passively acquire a lot of inert, fragmented knowledge. These students will be the victims of something called "rote learning." But if they are engaged in integrated, hands-on projects they will achieve integrated, real-world knowledge. By this more natural approach, students will automatically absorb the relevant facts needed. Dr. Hirsh further states that students who pursue a few projects in depth are thought to have the further advantage of gaining appropriate skills of inquiry and discovery in the various subject matter areas. Students will learn how to think scientifically, mathematically, historically, and so on. They will also learn all-purpose transferable skills such as questioning, analyzing, synthesizing, interpreting, evaluating, analogizing, and, of course problem solving - important skills indeed and well-educated people possess them. But the consensus view in psychology is that these skills are gained mainly through broad knowledge of a domain. Intellectual skills tend to be domain-specific. The all-too-frequent antithesis between skill and knowledge is facile and deplorable. (2)

This module, QUILTING ACROSS THE CURRICULUM, is designed to stimulate student creativity while enhancing basic core subject matter areas. Quilt making has been adopted as an American tradition because it has been developed as a union of different ethnic and cultural traditions. The stories of quilts and their creators are interwoven much like a patchwork quilt, creating a picture of the strength, struggle, and creativity of the American settler.

## Quilting History

Regarded as an American folk art, quilting has a long history prior to the settling of the colonies, quilting has been around since the days of Egyptian pharaohs. A craft born of necessity, it has blossomed through many periods of popularity, often for very practical reasons. Today, quilting satisfies the craving for a decorative art form that is also a personal form of expression. It can be applied to almost anything made of fabric.

Quilting is simply two or more layers stitched together in a decorative fashion and is an easy procedure for students to master.

Rich or poor, Victorian women were well-versed in the needle arts. Many had to be because stitching clothing and household goods for their families was essential. Others used needlework as a pleasurable leisure activity in an age when well-off women were judged by the proficiency of their decorative stitchery. You may wonder in an age before washing machines, spray starch and food processors, how did a woman find time to create lavishly elaborate quilts. She had household help for the daily routine chores. Even a middle class family generally employed a housekeeper. Well-off families often had a staff of four or more to help with the household chores such as cooking, laundry and cleaning. There was often a full-time nanny to care for the children.

Freed from time consuming daily chores, Victorian women had ample free time on their hands. Visiting friends and family was an important social pastime in this era devoid of telephones and E-mail. Women frequently carried needlework projects to work on while they traded tidbits of the latest community happenings, shared favorite recipes and household hints that would benefit their domestic staff. (3)

Just as in modern times, needlework fads waxed and waned in the Victorian era. In the 1880 s, women were enthralled with the creative challenge of sewing fancy "dress" fabrics into "crazy quilts". These quilts were stitched of luxurious fabrics and embellished with embroidery stitches, this decorative patchwork was both a test of a woman's skills and an outlet for her creative spirit.

Tiny scraps of velvet, satins, silk and moiré were often paired with novelty materials, such as silk cigar band wrappers, ties, hatbands, handmade lace and commemorative fabrics printed with pictures of famous people or important events. The fabrics were stitched over cotton muslin foundation squares or strips which were then joined. The foundations were needed to provide body to the sometimes flimsy fabrics.

When all the fancy fabrics were stitched in place, silk ribbons, colorful buttons and commemorative emblems were added for three-dimensional interest. The next step included fancy embroidery stitches which were carefully put in place over the seams of he patched scraps.

Although the stitchery helped to keep the patches firmly in place, its purpose was to show off a woman's embroidery skills. Vintage quilts often exhibit a splendid sampler of herringbone, feather fly, scroll, fern, lazy daisy and chain embroidery stitches. Sentimental messages of beautifully rendered flowers, birds, animals and gossamer spider webs were sometimes added. Many needleworkers signed their masterpieces with their name and date. Victorian crazy quilts were quite heavy when finished. Because of the weight of the fabrics and embellishments, these quilts were seldom quilted. Instead, they were given a backing fabric-often a black sateen - which was tacked into place. The
most popular choice for a tacking thread was black perle cotton. It was discreetly knotted on the back so as not to interfere with the opulent designs on the quilt top. The edges were most often bound with black velveteen or other dark colors so as not to detract from the quilt itself. Originally, large pieces of crazy quilting were used as bed coverings or tapestry-like wall hangings. Smaller pieces were exhibited as piano coverings, bell pulls, window toppers or cushions. Today, it is advisable to display large quilts flat to put as little stress as possible on the fragile fabrics. Smaller pieces can be framed under glass and used on a wall, preferably out of direct sunlight. But regardless of how Victorian needlework treasures are displayed, they are sure to enhance any space with a touch of vintage charm. (4)

Like so many other customs, quilting crossed the ocean with the pilgrim families who immigrated to America. These pilgrims often could bring very little, but quilts were always included in anticipation for the hard winters ahead. The hard winters came, and the settlers were very poor. They had no way of replacing even essential possessions when they wore out. Everything was repaired as well as possible, and reused again and again. This was certainly true of the family quilts, which were patched up with scraps of fabric from old clothing as long as they held together. After many repairs, the quilt top looked more like patchwork than solid fabric.

In the North quilting was serious business and was depended upon as vital protection against inclement weather. In Britain and Holland it became a kind of business, developing into something akin to a cottage industry. The quilting became more intricate, and as the level of craftsmanship rose, quilts (or "bed furniture" as they were called) became the most prized possession of many families and were passed down from generation to generation. (5)

## PREPARING TO TEACH

Today's quilters come from a variety of backgrounds and quilt for various reasons. While some quilters choose to work together on similar projects, others quilt as a means of their artistic expression. Quilt Guilds exist throughout various parts of the world and are established for the purpose of promoting and enhancing quilting art forms as well as quilting techniques. Students are encouraged to select their individual designs which express important moments or aspects of their lives. While some of my students chose designs to depict various school activities, others chose designs relevant to a family member or event. In order for students to completely buy into this project, they (students) must feel a sense of ownership of their creations.

This module will focus on the design and construction of a patch-work quilt that will encompass numerous content areas along with student activities for QUILTING
ACROSS THE CURRICULUM. This idea grew out of a teacher initiation to collaborate for the purpose of the production of holistic teaching modules. Holistic teaching modules are those where students have the opportunity to experience cross-
curricular teaching through the utilization of numerous subject matter areas. A student project is selected whereby all teachers involved could utilize the same project to teach various aspect of their course. This process would be completed in the first semester of the school year however; project completion may be extended through a portion of the second semester. It involves the commitment of each teacher to periodically meet to discuss the following:

1. The development of project plans - detailed procedures for the entire process;
2. The progression of the project;
3. The determination of the need for changes or modifications;
4. The identification of resources and other involved learning's and outcomes;
5. The development of remediation procedures;
6. Is the project on track with time and content coverage;
7. Is the project on track for completion;
8. The determination of overall outcomes;
9. The final statistical analysis of results inclusive of TAAS(Texas Assessment of Academic Skills), Stanford Nine, ACT, and SAT scores and content material;
10. The development of procedures for the presentation of project results. In this instance, the project of a "Patchwork Quilt" is agreed upon by the teachers involved. Each teacher develops their individual lesson plans for their respective content areas with the "Quilting Project" at the forefront. The time lines are the next consideration. These teachers would come together with lessons to determine the sequence of lessons to insure continuity, relevance, and focus. When the basic process is determined, the project begins.

At the end of the semester, teachers would determine the project progress, student interest, and project effectiveness in an effort to strategize project continuance. If, at the end of the semester, the project is incomplete, additional relevant lessons may be taught. At this time, plans are made for students to officially unveil and present their masterpieces to the school and community through an organized activity such as a library exhibition or awards ceremony. Our sessions will be planned during the school day where various teachers bring their classes to the exhibit in the sewing laboratory. A complete portfolio is kept by the teachers of all student learning's from each content area. This project develops camaraderie among teachers, ownership of teaching phenomena, support system for students, and overall growth for the school.

## GIFTED AND TALENTED STUDENTS

James Madison Senior High School offers Meteorology and Space Science as a special focus for gifted and talented students. Students enrolled in this program are carefully selected based on academic achievements as well as educational recommendations. This program offers a rigorous college preparatory curriculum inclusive of the following
courses: biology, chemistry, physics, space physics, Meteorology, Astronomy, and Computer Applications along with the basic core courses. Many of the gifted and talented students (magnet students) will also be involved in Quilting Across The Curriculum. Magnet teachers will meet with other teachers for the purpose of insuring project continuity. Magnet students will research topics relevant to the reaction of various fabrics and textiles to weather conditions. Other research topics will be determined as the project progresses.

## PROCEDURE FOR UTILIZING THE QUILT PROJECT

1. Determine the time available to work with students. Be realistic. Allow for vacation days and/or other days when students are not in the class room;
2. Provide opportunities for students to research quilts and the quilting process;
3. Provide sample quilt square/quilt blocks, completed quilts, and pictures and samples of quilt varieties;
4. Have students design their individual quilts within your specifications;

Example: Denote number and size of squares or strips. I chose 6X6" squares for a total of 36 as a beginning.
5. Have students determine total number of squares needed to complete a quilt for the ir desired bed size; (MATH EXERCISES)
6. Instruct students in the procedure(s) needed to cut or tear fabric to get desired squares or strips;
7. Conduct lessons on the use of the sewing machine;
8. Have students construct quilt tops according to their individual designs;
9. Make a list of ALL supplies needed to construct various quilt sizes along with estimated costs.
10. Provide fabric samples and/or remnants from previous projects for students who may not be able to afford materials.
11. Discarded neckties may be used as quilt blocks especially for students without supplies.
12. Students should be encouraged to work as quietly as possible in order to insure safety standards as well as concentrate on the task at hand.
13. Lap quilts and quilted wall hangings may be used in instances where students check into the class late or where time, workspace, or equipment are limited.

See disc

See disc

See disc

See disc

See disc

# QUILTING ACROSS THE CURRICULUM <br> MATHEMATICS STUDENT EXERCISES 

## Algebra

Determine the number of inches there are in each part of a yard.

$$
\begin{aligned}
& 1 \text { yard = 36 inches } \\
& \frac{1}{4} \text { yard }=\mathrm{X} \\
& 1 \\
& \frac{1}{4}=\mathrm{X} \text { cross multiply } \\
& 136 \\
& X=36 \times 1 / 4 \\
& X=\frac{36}{4} \\
& X=9 \text { inches }
\end{aligned}
$$

A. $1 / 3$ yard $\qquad$
B. $7 / 8$ yard $\qquad$
C. $2 / 3$ yard $\qquad$
D. $3 / 8$ yard $\qquad$
E. $3 / 4$ yard $\qquad$
F. $1 / 2$ yard $\qquad$
G. $5 / 8$ yard $\qquad$

## QUILTING ACROSS THE CURRICULUM

## MATHEMATICS

## STUDENT EXERCISES

Quilts or bed coverings need to be full enough to adequately cover the bed. In determining the size of bed covering, one must measure accurately, reduce fractions, add measurements, and be able to find fractions of a yard.

1. Measure the following lines and write the measurements in the blank spaces provided.
A.
B.
C.
D.
E.
F.
2. Using a ruler, mark the indicated distance on the lines below.
$11 / 2$ inches
$21 / 4$ inches
5 inches
$5 / 8$ inches
1 inch
$11 / 4$ inch
$3 / 4$ inch
$33 / 4$ inches
$23 / 4$ inches
3 inches
3. Reduce the following fractions to the lowest common denominator.
A. $6 / 8$
B. $7 / 4$
C. $2 / 4$
D. $9 / 8$
E. $4 / 6$

## FOOTNOTES

1. Majorie East, Home Economics: Past, Present, and Future
2. E. D. Hirsh Jr., "You Can Always Look It Up...or Can You?" American Educator, (Spring 2000) 4.
3. Jean Ann Eitel, "Crazy For Quilts", http://www.countrycollector.com/crazyforquilts.html
4. Connecting Up: An Inter-Disciplinary Quilting Curriculum. Education Strategies, Inc., St. Paul, Minnesota.
5. Connecting Up.

## BIBLIOGRAPHY

Connecting Up: An Inter-Disciplinary Quilting Curriculum. Education Strategies, Inc., St. Paul, Minnesota.

East, Majorie. Home Economics: Past, Present, and Future. 1980
Eitel, Jean Ann, "Crazy For Quilts", http://www.countrycollector.com/crazyforquilts.html Hirsh, E. D. Jr. "You Can Always Look It Up...or Can You?" American Educator, (Spring 2000) 4.

