

TABLE OF CONTENTS

	Page
Start with Your Comfort Level	2
Why Now? The i-Generation and 21st Century Skills	2
Arts Are Interactive	3
21st Century Learning Skills	3
New Directions in Kentucky Education	4
Team Teaching and Other Strategies	5
The Importance of Resources	5
What Does an Integrated Lesson Look Like?	6
Aligned Content	7
A Closer Look: Sample Lesson Outlines	7
Social Studies and Craft Traditions	7
Sample Lesson: Introduction to Basket Making Traditions	9
Sample Lesson: Native American Pottery Traditions	11
Sample Lesson: Crafts and Economics	14
Berea's Storied Past	15
Craft and Economics: Classroom Business-Production of Ornaments	16
Resource Guide	18

Arts integration is not a new concept. Even before Harvard researcher Howard Gardiner revolutionized the way we theorize about learning and intelligence with his theory of multiple intelligences, teachers knew that they had to differentiate their instruction in order to address the diverse learning styles of students in their classrooms. Brain research indicates that learning, whether the retention of factual information or the development of critical and creative thinking skills, is enhanced by rich context and multisensory instruction.

Integrating arts into the social studies curriculum is an excellent way to allow students with diverse learning modalities to become more effective learners, but it can actually accomplish much more than that. The arts reflect the unique cultural perspectives of diverse cultures and illuminate migration patterns and cultural interactions. Because artists respond to and impact the societies in which they live and create, the arts provide a window into other times and places. Learning about diverse cultures through their arts can help to explode stereotypes. The arts are a critical component of social studies in addition to being an effective way to teach.

At the same time, cultural and historical aspects of social studies are also components of the Arts and Humanities Program of Studies and would provide a depth of cultural context that would enrich the learning in the arts.

But while many teachers know that their students would benefit from an integrated approach, achieving it is perhaps more challenging than ever. Teachers who are overwhelmed by the breadth of material that they must cover within a semester are often hesitant to try to add one more thing to an already jam-packed curriculum.

START WITH YOUR COMFORT LEVEL

This is not to say that you have to revamp your entire curriculum in order to add arts to the social studies classroom or social studies to the arts classroom. You can begin with one or two activities, and you can begin at *various levels* of integration.

Start where you are comfortable and expand slowly. Partner with another teacher or bring in an outside expert like an artist in residence or a cultural speaker. Utilize high-quality multimedia resources like that found in the Social Studies Arts Toolkit prototype. And document what you do. This will help you track your own professional growth, and it will provide the documentation that your school will need for the Program Review in Arts and Humanities.

WHY NOW? THE I-GENERATION AND 21ST CENTURY SKILLS

The benefits of interdisciplinary education have been well documented. Not only does it appeal to students with diverse learning styles, but it also allows students to make connections among the different branches of learning and to reinforce their understanding and knowledge.

The need for integrated instruction is more compelling than ever for two reasons: the way that students think and process information is changing, and the world for which we are preparing them is changing.

Today's students are sometimes referred to as the i-Generation, the net generation, or digital natives. They have never experienced a world in which people could not be constantly connected by cell phones, in which information was not instantly accessible through mobile devices, or in which social networking did not refer to electronic media. They *expect* to be able to individually customize everything from the ring tones of their cell phones to the parameters of their internet research. Even students whose home environments are not technology oriented, whether due to financial constraints or conscious choice, are maturing as part of a techno-driven, inter-related society.

Teachers often complain that students have very short attention spans, and just want to be entertained. Some studies suggest that the attention span of an average elementary student is as short as nine seconds. Does this mean that teachers need to provide new stimuli every nine seconds in order to compete with Wii stations for their students' attention? Certainly not. But it does mean that teachers need to be aware of how their students' life experiences impact the learning processes.

In his book, *Rewired: Understanding the iGeneration and the Way They Learn*, psychology professor Larry D. Rosen identifies distinctive iGeneration traits, including:

- Early and continuous exposure to technology;
- Desire for immediate gratification;
- Expectation of innovation;
- Ability to use media; and
- Adeptness at multitasking

Clearly not every child today shares these traits, and just as clearly there are more influences on today's youth than immersion in technology. But these traits are pervasive enough that it's important to consider them when creating lesson plans and units of study. Students are bored by instruction that focuses on a single task through lecturing or repetition. They are interactive rather than receptive learners. They want to be engaged in their learning or they will tune out.

ARTS ARE INTERACTIVE

While incorporating technology into instruction is one way to engage i-Generation learners, it is not the only way, and it is not always the best. Creating and performing in the arts is highly interactive, student-centered learning that can help to balance an over-dependence on (or downright obsession with) the outside stimulus provided by technology.

Students can expand their concentration and focusing skills beyond a desire for instant gratification as they learn to interact with the structures and materials of diverse art forms and cultural styles. They can learn to use actual 3-D media as well as how to manipulate icons on a computer screen, thus developing their kinesthetic intelligence and problem solving ability. They can learn to collaborate with real people rather than interacting with virtual entities over which they have ultimate control, thus strengthening their interpersonal intelligence and developing civic literacy. They can learn to be the generators of innovation rather than expecting the world to generate innovation to satisfy their every whim. They can learn to express their own thoughts and ideas in a variety of ways and to develop the critical thinking skills that will enable them to evaluate and analyze the barrage of information streaming into their consciousness from the abundance of technology in their environment.

Integrating content from arts and social studies, with or without technology components, will empower students to make constructive use of their adeptness at multi-tasking and become active rather than receptive users of technology.

21ST CENTURY LEARNING SKILLS

Arts infused instruction not only engages i-Generation learners, but also helps to prepare them for a world that is in a state of accelerating change in terms of technology and economics and social, political, and environmental challenges.

In the 20th century, most jobs involved doing the same thing every day with each worker doing a separate part of the job alone. But today's classrooms must prepare students for a future in which collaboration and interdisciplinary work are the norm.

The Partnership for 21st Century Skills advocates for the integration of “21st century skills” and “21st century interdisciplinary themes” into core subjects. They identify the essential interdisciplinary themes as:

- Global awareness;
- Financial, economic, business, and entrepreneurial literacy;
- Civic literacy;
- Health literacy; and
- Environmental literacy.

They identify 21st century skills as:

- Critical Thinking and Problem Solving
- Communication
- Collaboration
- Creativity
- Innovation
- Information Literacy
- Media Literacy
- Information, Communication, and Technology Literacy
- Flexibility and Adaptability

- Initiative and Self-Direction
- Social and Cross-Cultural Skills
- Productivity and Accountability
- Leadership and Responsibility

The Kentucky Department of Education recognizes the importance of including 21st century interdisciplinary themes and developing 21st century skills in students. The KDE has provided school administrators with resources to enable them to integrate 21st century themes and skills into the overall school program beginning in 2011-12.

It is little wonder that teachers feel overwhelmed by the demands made on them. Not only are they expected to teach a challenging breadth and depth of content, but they are also expected to develop high-level thinking, behavioral, and social skills in their students and weave in interdisciplinary themes.

The good news is that the integration of arts and social studies, rather than being one more item on an overflowing plate, is a tool that can be used to help develop 21st century skills and address 21st century interdisciplinary themes, especially global awareness and civic literacy.

NEW DIRECTIONS IN KENTUCKY EDUCATION

With the enactment of Senate Bill 1 by the Kentucky General Assembly in 2009, the Kentucky Department of Education began the revision of the state assessment and accountability processes. While much of the work is still in draft form, a number of new directions have become clear.

First of all, arts and humanities have been removed from the state assessment, and school accountability will now be measured through a Program Review process, an approach that encourages integrating the arts across other content areas.

New Core Content will be developed based on the new national standards for arts education, but for the present, the content for instruction is based on the Program of Studies. This allows for greater flexibility in selecting the representative artists and works of art from the diverse cultures and time periods studied, which does make integration with social studies somewhat easier. For example, a painting often included in U.S. History in 5th or 8th grade is *Manifest Destiny* by John Caleb Bingham. Bingham was not one of the artists included in the previous Arts and Humanities Core Content, but with the shift from Core Content to Program of Studies, it becomes possible to include this in an integrated project that meets both social studies and arts and humanities learning targets.

Social studies assessment is also still in the developmental stage, but the new Common Core State Standards in social studies will replace the Kentucky Core Content (which is currently the basis for instruction and assessment). The Big Idea of Culture and Society, which is in the current Core Content, invites arts integration. While it is slated to be eliminated in the new Common Core State Standards, it is likely to be replaced by the arts, making the incorporation of the arts into the social studies curriculum even more focused.

Another new document that defines best practices in the classroom is “Characteristics of Highly Effective Teaching and Learning,” available online at the KDE website www.education.ky.gov/KDE/Instructional+Resources/Highly+Effective+Teaching+and+Learning/HETL+Common+Characteristics.tm.

There is a list of the characteristics that relate to all content areas and lists for each separate content area. Both lists refer to integration as one of the highly effective characteristics.

TEAM TEACHING AND OTHER STRATEGIES

Clearly there are compelling reasons, both pedagogical and practical, for integrating social studies and the arts, but how is this to be accomplished?

Integrated instruction is most effective when it is project-based and includes a hands-on component and an opportunity for discussion. It could be as short as an activity completed in one class period or as long as a semester unit.

In an ideal world, an arts, music, dance, or drama specialist and a social studies specialist would have common planning time and could develop and implement interdisciplinary lessons, units, or an entire curriculum. In reality, such common planning time is rare, and at the middle and high school levels, the arts specialist and the social studies teacher do not always teach the same group of students, making collaboration difficult. Many elementary schools do not have an arts or music specialist, or the specialist serves so many classes that they may have as little as 45 minutes every other week with any given class and no common planning time with the classroom teachers.

Working out the logistics of team teaching is worth the effort because it enables each teacher to bring his/her strengths to the project and provides the opportunity to dialogue about design, implementation, and assessment. If your school arts, music, or humanities specialist sees your students only once a week, you can still collaborate. Rearrange your schedules to afford at least one common planning session, meet after school, or develop a collaborative lesson plan via e-mail, or request that a PD session be scheduled that allows collaborative planning.

In addition to the obvious collaboration between arts specialists and social studies teachers, there are other configurations for collaboration. Because of the reshuffling of staff due to budget cuts, some classroom generalists or social studies teachers have previous experiences as a specialist in one of the arts disciplines and can serve as a partner or a resource to other teachers as well as being equipped to undertake an integrated project on their own. Sometimes the library media specialist serves (or has served) as a humanities resource and/or drama specialist and can be a valuable partner or team member. The language arts teacher may provide cultural context and familiarity with folktales, Greek mythology, or Shakespearean plays.

Another strategy for collaboration is to bring in an artist in residence. The Kentucky Arts Council (www.artscouncil.ky.gov) maintains a roster of juried artists who have been trained to work in school settings and also sponsors a grant program to cover much of the expense for bringing in an artist in residence. Teachers and artists design a residency program together in order to make the best use of the artist's presence in the school.

Residency artists often have experience with the arts of diverse cultures and can bring that expertise into the arts program. Or they might collaborate with a social studies or classroom generalist to share their hands-on skills in their art form. They can even spend part of their time with the social studies teacher/generalist and part of their time with the arts specialist, providing a bridge for collaboration. The residency can include up to three hours of professional development, which can be one-on-one or small group sessions devoted to building on the residency experience to plan for future integrated projects.

THE IMPORTANCE OF RESOURCES

While collaboration is an excellent way to achieve integration, it is also possible for a single teacher to provide integrated instruction. This generally means that the teacher must rely on resources to flesh out the lesson. Unfortunately, many of the resources available to teachers for integrating cultural arts into social studies take a “clip art” approach, often with a flagrant disregard for cultural beliefs or religious views. Such resources encourage the hands-on creation of crafts, visual arts, story, music, dance, or drama that mimic the superficial characteristics of an art form while providing a sketchy or inaccurate overview of the cultural context in which the art form is based. This approach can actually reinforce stereotypes, rather than exploding them.

Providing students with virtual experiences of the arts, even if those experiences are culturally authentic, can also do more harm than good if presented without creating appropriate context. When students experience an art form from a diverse culture, their initial response is often to focus on how different this art form is from the art they have encountered within their own culture. Reactions may vary from “weird!” to “cool!” By having students focus on the relationship of the art to specific social studies content, their responses become more informed and gain depth. The KET Arts Toolkits include many resources that provide background information for teachers and students that can inform this process.

Allowing students time to discuss their reactions to a cultural arts experience, whether virtual or hands-on, inspires deeper thinking. Asking students to reflect on the role of the arts within societies leads to an enhanced understanding of both the arts and the society being investigated. Questions and discussion can guide students to understanding the commonality of the human experience and the diversity of cultural perspectives.

Combining virtual experiences of culturally authentic art forms embedded within a framework of cultural context, hands-on arts activities, and opportunities for discussion about the role of the arts within societies is a three-pronged approach that leads to greater cross-cultural understanding, which is the ultimate goal of social studies.

WHAT DOES AN INTEGRATED LESSON LOOK LIKE?

A truly integrated lesson or unit has learning targets from both content areas (arts and social studies), instruction in both areas, and assessment in both areas.

According to the Consortium of National Arts Education Associations, “Interdisciplinary education enables students to identify and apply authentic connections between two or more disciplines and/or to understand essential concepts that transcend individual disciplines.”

There are different levels of integration, and they all have value. A classroom or social studies teacher working on his/her own might want to experiment with a few arts strategies in arts areas that are comfortable for them, whether through education, experience, or avocation. Art teachers might want to try going more in depth in one or two cultures that they are knowledgeable about or to add an economics, civics, or geographic component to their curriculum.

Teachers who are exploring integration at this level do not need to develop learning targets and summative assessment strategies in both social studies and the arts but just in their own instructional field. However, they should establish formative assessments that allow them to gauge if the inclusion of the other content area has enhanced learning and/or nurtured critical and creative thinking skills. This will help teachers critique and expand their integration strategies. While this is not true integration, it enriches the learning experience for students.

It is important to provide students with sufficient guidance so that you are not setting them up for failure. For example, if you tell students to illustrate an historic event or to create a dance that interprets the structure of government without instruction on how to accomplish these tasks, a few students with innate talent will succeed while the rest fall short, thus strengthening the misconception that success in the arts depends entirely on natural talent, not on instruction, practice, and artistic growth. If you are not able to partner with an expert, or are not yourself an expert in the field, keep the hands-on component simple and utilize resources that provide the necessary scaffolding.

The next level of integration is to co-plan a lesson even if you cannot co-present. For example, the school visual art specialist might help a fourth or fifth grade generalist or social studies teacher plan a hands-on quilting activity. Conversely, the social studies teacher could let the drama teacher know which cultures or historic periods they have been studying in depth so that the drama teacher might plan a theatre activity related to that culture.

ALIGNED CONTENT

One of the factors that simplifies integration of the arts and humanities and social studies is that the cultural or historic context for both content areas is the same at the various grade levels. Essential questions that might be explored by an integrated approach within the grade-level context include:

- How do/did the arts reflect the dominant culture and sub-cultures of the context?
- How do/did the arts impact the dominant culture and sub-cultures of the context?
- What was/is the relationship between the arts and government?
- How did/do the arts express the historical perspective of the context?
- How do/did the arts express the geography of the context?
- What role do/did the arts play in the economy of the context?
- How did/does the economy of the context inspire/restrict/impact the arts?

Activities could include:

- Performing —with contextual understanding—an artistic product that reflects the cultural context
- Creating an artistic product that reflects a historical perspective of the context or that uses a technique from the context to reflect on the historic perspective of your own times and culture
- Expressing geography through cartography, map making, model making
- Using an art form to express geographic concepts (dance of landforms, music of climate)
- Creating with materials specific to a geographic context
- Producing an artwork, including the budgeting aspects
- Creating a business plan (or actually implementing) an arts-based business
- Using an art form to express an economic concept
- Using an art form to express a concept of government
- Exploring artistic collaborations as structures similar to various forms of government
- Using an art form to interpret/comment on/express opinions about a civic issue or current event

A CLOSER LOOK: SAMPLE LESSON OUTLINES

These lesson outlines were adapted from “Arts across the Curriculum,” a resource developed by Judy Sizemore for Berea Tourism, a curriculum developed to be used before or after a field trip to the studios of working artists in Berea, Kentucky. You can arrange to take your students on a field trip to Berea by contacting Berea Tourism at www.berea.com/arts-across-the-curriculum or you might arrange a field trip to a working artist studio in your own community. You could also invite a local artist to visit your classroom or arrange an artist residency. Interaction with practicing artists enriches the experience of learning about the history and cultural context of the arts and is part of a high-quality arts program.

Additional examples can be found in the Arts and Culture section of the KET Visual Arts Toolkit

SOCIAL STUDIES AND CRAFT TRADITIONS

In most cultures and time periods, crafts have served both functional and aesthetic purposes, bringing beauty and sometimes cultural or spiritual significance to everyday activities.

Sometimes the crafts also represent class distinctions and social hierarchies. As you research crafts traditions of various cultures and time periods, consider not only the objects themselves but also the circumstances of their creation. Were the crafts created by the user, or were they created by craftsmen for the use of their societal peers or for use by the upper class or the ruling class?

Consider also what the crafts tell us about the natural resources available to the artisans. Did they use only indigenous materials, or does the use of materials from other regions indicate trade?

What was the economic situation in which these crafts were created? Were they mass produced for barter or sale to peers? Were they commissioned by the church or by a member of the ruling class? Did the government have a role in restricting the importation of crafts? How did this protect local crafts traditions or impede the development of foreign markets?

Research into the crafts of a culture or time period is a richer learning experience if it is augmented by a hands-on activity in which students create a craft. It enhances their understanding of the media and their appreciation for the skills necessary to attain mastery. Resources for web-based arts lessons are included.

You can use the activity suggestions below to develop a truly integrated, side-by-side lesson plan or unit or as enrichment to either the social studies or the visual arts curriculum. In some activities, the art form is explored in various cultural contexts. In others, various crafts or a particular culture or time period are grouped together to provide an overview of society through the lens of crafts. A few target a specific craft from a specific culture/time period as a way to illuminate economic, social, or governmental aspects.

SAMPLE LESSON: **Introduction to Basket Making Traditions**

Grade Level: Intermediate

Time Required: 2-3 sessions

Teacher preparation:

Identify grade appropriate resources (web-based and print) that students can use to research the basket making traditions of the cultures you wish to target. Suggested websites:

- The National Museum of African Art www.nmafa.si.edu/pubaccess/pages/tourfrm.htm
- The National Museum of the American Indian online exhibits – Language of Baskets www.nmai.si.edu/
- www.basketmakers.com
- www.nationalbasketry.org
- www.traditioninnovation.org/galleries/gallery.baskets.html

Suggested print resources:

- *American Baskets: A Cultural History of a Traditional Domestic Art* (Robert Shaw, Clarkson Potter Publishers, New York, 2000)
- *Native America in the Twentieth Century* (Edited by Mary B. Davis, Garland Publishing, Inc., 1996)

Introduction:

Introduce the lesson by reading books that show the cultural role of baskets, such as *Basket* by George Ella Lyons (Appalachian culture) or *The Flute Player* by Michael Lacapa (Apache culture) or by showing the PowerPoint presentation on the purposes of baskets in three diverse cultures (Appalachian, Cherokee, and African American/Gullah) found at www.traditioninnovation.org/teach/teach.powerpoints.html.

You could also invite students to bring in baskets from home and have a basket show-and-tell.

Procedure:

Distribute the student sheet “Basket Making.” After allowing students time to read the sheet, lead a discussion about baskets that you have observed during the introduction, focusing on the underlined terms that are most relevant to your purpose. Tell students that you want them to work in teams to research the history of baskets in diverse cultures. You may assign particular cultures or give students choices. Ask for a written, oral, or PowerPoint presentation or ask them to create posters. But whatever format is used, students should include copies of photographs as well as written information.

Their reports should answer the following questions about each basket represented:

1. What culture does it come from?
2. Where was it made?
3. When was it made?
4. How was it made (technique)?
5. What materials were used to make it? Where did they come from?
6. Were the materials dyed or used in their natural state?
7. How would you describe the pattern?
8. Were additional decorations added? If so, what?
9. How was the basket used?
10. What other types of baskets were/are made by people of this culture?

Allow class time or assign the research as homework. After student teams have made their presentations or submitted their reports, work as a class to make a large chart comparing and contrasting the basket making traditions they have researched. Include a hands-on basket making activity before or after the research component.

Hands-on Activities:

- Engage students in making a simple, coiled pine needle basket. Instructions can be found at www.knowitall.org. Students can decide to make a traditionally shaped basket or to follow a more individualized approach. A gallery of contemporary baskets that might provide inspiration can be found at www.nationalbasketry.org
- Directions for another coil made basket can be found at www.princetonol.com
- Many companies sell basket-making kits with instructions. If you purchase a classroom set of kits, students can still give their own creative touch to their baskets. You might have them dye some of the reeds or use a variety of embellishments. They can vary their weaving pattern, the form of the basket, and the way they finish the rim.

Basket Making

Basket making is considered one of the most ancient technologies as well as one of the oldest folk arts. From ancient times, people all over the world have woven baskets to help meet their needs for food, clothing, and shelter: gathering seeds, carrying clams, winnowing grain, storing nuts, cooking acorn mush, and even making hats. Many cultures used basket weaving techniques for their homes or for temporary shelters. Although baskets are highly functional, even ancient basket makers took the time to make their baskets aesthetically pleasing as well. Diverse cultures used different forms, patterns, and designs to express cultural values as well as for practical reasons.

The three main techniques of the basket weaving process are plaiting, twining, and weaving.

Basket making is largely a functional art, but baskets have also been used for recreational and ceremonial purposes.

Baskets are made from the fibers of a variety of plants. In prehistoric times, basket makers usually used plants that grew in the environment of their homeland. People living in a desert environment had different natural resources than people living in a wetland or arctic environment.

As people migrated, they took their basket making traditions with them and adapted them to the new materials they found in their new environments. They often learned new techniques from the native inhabitants, often finding ways to cooperate on a personal level even when there were conflicts between newcomers and natives.

Today, plastic containers and commercially produced baskets have largely replaced hand-crafted baskets for purely functional purposes, but baskets are still made and appreciated for their aesthetic qualities. High-quality handmade baskets are sought after for their decorative appeal and are an important part of the crafts economy. Consumers are willing to pay the high price commanded by handmade baskets because they recognize the investment of time and skill required to produce a well-made basket.



SAMPLE LESSON:

Native American Pottery Traditions

Grade Level: 3-6

Time required: 2-3 class sessions

Materials:

- Clay (1/2-1 pound per student) Self-hardening clay will dry to a harder state than plain clay, but plain clay is more authentic (and much cheaper). Firing is nice but not necessary.
- Freezer wrap cut into pieces about 9" x 9" - one per student
- Sturdy zip-close plastic bags - one per student
- Clay modeling tools or craft sticks
- Kitchen sponges cut into pieces about 3" x 3" - one per every four students
- Bowls or margarine tubs for holding water - one per every four students
- Hand wipes and paper towels

Most Native American cultures have pottery traditions dating to long before the arrival of Europeans. Divide the students into small groups, and have each group conduct research (using the library media center and the internet) to research the past and present pottery traditions of one culture. Ask them to prepare a presentation including visuals to share what they have learned.

As a hands-on extension, have students create coil pottery.

Introduction:

Tell students that before the invention of the potter's wheel and plaster of Paris molds, all pottery was made by hand building techniques. One of the most common techniques was "pinch and coil." Some potters still use this technique.

Preparation:

Select and purchase the type of clay you will use. Self-hardening clay will dry to a harder state, but plain clay is more authentic and less expensive. Purchase the clay in moist form and check the condition of the clay. You want it to be moist enough that it can be easily worked or it will just be frustrating. If necessary, you can add a small amount of water to the plastic bag and reseal it overnight. If you have purchased a large block of clay (25 pounds), you will want to divide it before class and put a piece for each student into a plastic bag that will zip lock. You can easily improvise a clay cutter by tying a length of 12 or 14 pound monofilament (fishing line) between two 6" lengths of dowel rod.

Have your zip-lock bags ready and open so that you can work quickly. Set the block so that it is standing on end, open the bag, and turn down the plastic bag. Holding the monofilament taut, make a slice vertically through the center of the block as far down as you can go. Make a second vertical cut at right angles to the first, so that the block is sliced into four parts. Make a cut horizontally about 1 and 1/2 inches from the top, keeping the monofilament taut and roughly parallel to the surface of the block. As you pull the monofilament through the clay, you will cut off 4 blocks at a time. Put them in bags and seal. Repeat until you have only 4-5 inches left at the bottom of the block. Turn it sideways and slice off blocks 1-2 inches thick and put them in bags.

The pieces in the bags will not be equal in size, but you should have enough for all your students to have a bag with quite a few bags left over so that students who need more can have another bag.

Procedure:

Demonstrate how pots and bowls are made using the pinch and coil technique (described below), and then distribute materials.

Instruct students to keep their clay in the closed zip-lock bags at all times when they are not using it, or it will get too dry to use. Have them work on freezer wrap paper placed shiny side up instead of the tabletop. This will keep your tables cleaner and will allow the students to turn their pieces as they work. It will also avoid the heartbreak of finding a piece is stuck to the table. Pieces of pottery should be allowed to air dry on the freezer wrap for at least twenty-four hours. Then the freezer wrap will easily peel away.

The Pinch and Coil Method:

Begin with a ball of clay that fits comfortably into your hand (no larger than a softball). Roll the ball until it is fairly round and smooth. Holding the ball in one hand, insert your thumb into the clay, making an opening. As you rotate the ball in one hand, pinch the clay between your thumb on the inside and your fingers on the outside. This will enlarge the opening and make the walls thinner. After a few rotations, place the clay on the freezer wrap and push it gently down to give it a flat bottom. Now you can continue turning and pinching as you rotate the forming pot. You will be able to feel if the walls of the pot are becoming uneven and apply more or less pressure accordingly. Be careful not to get your walls too thin at this point. You want your walls to be about $3/8$ "– $1/2$ " thick. (A good analogy for kids is to keep walls as thick as a cookie, not a cracker.) If you get thin spots, you can take a small wad of clay and work it into the wall as a patch.

Now that your base is made, you are ready to add height by adding coils of clay. Take a piece of clay about the size of a lemon, and squeeze it in one hand into a cigar shape. Place the "cigar" on the tabletop and roll it back and forth using your extended fingers. Begin at the center of the "cigar" and move your hands outward as you roll, keeping an even pressure. (Do not try to roll on the freezer wrap.) The coil will get longer and thinner, taking a snake shape. Again, feel for the evenness with your fingers and adjust your pressure as needed. (This takes practice!) Roll the snake out until it is slightly thicker than your pot wall. Hold it loosely around the rim of your pot, and pinch off both ends to make the "snake" the same diameter as your pot rim. Press the two ends of the snake together, creating a clay ring. Smooth the joint so that it does not show, and place the ring on top of the pot. Using your fingers, gently attach the ring to the rim. Smooth the joint inside and outside.

To build up your pot, add more coils in this same manner. If you want the sides of your pot to flare out, make each coil slightly larger than the rim. If you want the sides to taper in, make each coil slightly smaller than the rim. As you work smooth each ring to the layer below. If you wish to leave the coils showing on the outside, you may smooth only the inside joints. Be careful throughout this process not to allow your pot's walls to become too thin. If you feel thin spots, apply a dab of clay and smooth it into place.

As the clay begins to dry, dip a sponge in the water, squeeze it out well, and use it to moisten and smooth the clay. Caution students against using too much water. This will result in a weak pot - and a big mess! (NOTE: Some teachers prefer not to provide groups of students with water. Instead, students come to one central bucket of water to dip and squeeze out their sponges under supervision. Whichever strategy you use, be sure that the water is disposed of outside, not down the drain as it could cause blockage.)

When you have reached the desired shape, smooth all joints, and do the final shaping with your fingers. Always make sure you are supporting both sides of the walls of the pot, one hand on the inside and one on the outside. You may do the smoothing with fingers, modeling tools, and/or damp (not wet!) sponges.

Designs may be added with the modeling tools. Caution students against cutting their designs too deep, or their pots will be weakened.

Allow enough time to involve students in clean up, including cleaning the sinks where they wash their hands.

You may allow students to paint their pots with tempera or acrylic paint. This can be done before or after the pots dry. The paint will shrink with the clay and actually make the piece somewhat more durable. (Do NOT paint pots that will be fired.) It is easiest to do the painting before removing the freezer wrap.

Allow the pots to air dry out of direct sunlight and away from a heat source for 1-2 days before removing the freezer wrap. If students are taking the pottery home, it is best to let them take it on the freezer wrap and remove the wrap at home. It is also safest to have students bring in cardboard boxes to transport their masterpiece. Crumpled newspaper makes a good “nesting” material. If you plan to fire the pots in a kiln, be sure to let them dry until they are bone dry. Unless you plan to fire the pots in a ceramic kiln, remind students that unfired pots will not hold water (or milk, or soup, or soda pop...) and are quite fragile. Even unfired pots will last for years if handled carefully.

Formative Assessment Suggestions:

Allow students to evaluate their own efforts. What did they learn about working with clay? Was it harder or easier than they expected? What was successful about their pottery making effort? What would they like to change next time?

SAMPLE LESSON:

CRAFTS AND ECONOMICS

Grade level:High School

Time required: 1-2 class sessions

What does supply and demand have to do with studio potters? Print the article found at www.ceramicstoday.com/articles/zamek.htm. After students read it, ask them to work in small groups to create a graphic representation summarizing the impact of supply and demand on the production, profitability, and sales of handmade pottery.

Specialization:

Many artists in Berea, Kentucky, got their start at the Student Crafts Program at Berea College and continue today as Berea's studio artists. Ask students why they think there are so many studio artists in Berea. Explain that Berea specializes in the production of quality crafts.

Hand out or project the article on the next page (adapted with permission from www.Berea.com), and ask students to respond to one or more of the following questions. You may ask them to respond in open response or journal entry format or to write a more formal essay or expository report. You may even assign them to conduct further research and write a paper with cited resources.

1. How did Berea become a center for handicrafts?
2. What factors contributed to Berea College's original success in producing and marketing Appalachian handicrafts? (Consider factors such as supply and demand, natural resources, human resources, and location.)
3. Why was an economy based on mountain handicrafts a good choice for Berea at that time? (Consider factors such as capital resources, supply and demand, natural resources, human resources, and location.)
4. What factors contribute to the college and community's continued success in today's crafts market? (Consider factors such as supply and demand, natural resources, human resources, and location.)
5. How has Berea's specialization in handmade crafts impacted the economy of the state of Kentucky and other Appalachian states?
6. Explain how the culture of Appalachia developed a crafts economy that influences behavior and responds to human needs.
7. What are some of the potential threats to the continued success of the crafts-based economy and measures that Berea's artists are taking and could take to minimize the impact of those threats? Consider how factors such as globalization and the internet affect marketing strategies. (See www.berea.com/studio-artists-at-berea.)

Extension:

Does your community have an economic specialization? Research its history and current trends using the questions above as a guide. Write an essay about your community's area of specialization.

BEREA'S STORIED PAST

In 1850, the area today known as Berea was simply called “The Glade.” In 1853, Cassius M. Clay, a well-to-do Kentucky landowner and prominent leader in the movement for gradual emancipation of slaves, offered abolitionist preacher Reverend John G. Fee a 10-acre homestead on the edge of the mountains. Fee accepted and established an anti-slavery church with 13 members on a ridge they named “Berea” after a biblical Greek town that had been receptive to the gospel.

Fee started a one-room school in 1855 that eventually became Berea College. He believed in a school that would advocate equality and excellence in education for men and women of all races based on principals of learning, labor, and service. Thus, Berea College began as the first interracial and coeducational college in the South.

During the Civil War, the town of Berea was a refuge for the families of fleeing Southern black men who enlisted in the Union Army at Camp Nelson in Jessamine County. In 1866, the first full year of education after the Civil War, Berea College enrolled 96 blacks and 91 whites.

In 1904, the Kentucky state legislature passed the Day Law, targeted at Berea College, which forced school segregation. The College fought the legislation all the way to the U.S. Supreme Court and lost. Forced segregation remained in effect until 1950. In the interim, Berea College opened a sister school for blacks, the Lincoln Institute outside of Louisville. At the same time, Edwin Embree, grandson of John Fee, was tapped by Julius Rosenwald to lead his famous organization that provided initiative, money, and guidance for the building of more than 5,300 schools for rural black communities in the South.

In the 1890s, a growing national interest in the culture and traditions of Appalachia by writers, academics, missionaries, and teachers led Berea College president William Frost to take traditional coverlets exchanged by students for tuition on a fundraising trip north. Frost saw in the mountain coverlets the potential for preserving a craft tradition and—at the same time—developing a new market for Appalachian crafts. With the support of donors, Berea’s “Fireside Industries” began in 1883, followed by the “Homespun Fair” first staged on Commencement Day in 1896. Berea College’s history of leading the Appalachian craft revival was firmly entrenched. In 1890, a coverlet from Berea debuted at the Paris Exposition along with the Eiffel Tower, winning a gold medal.

As a testament to the interwoven relationship between town and college, in 1960, Berea College helped sponsor the formation of the Kentucky Guild of Artists & Craftsmen. The College provided free office space and later two boxcars that traveled as the Kentucky Guild Train, in all likelihood the nation’s first mobile arts program.

In 1988, Berea was designated as the “Arts and Crafts Capital of Kentucky” and today it is home to numerous artists and the Kentucky Artisan Center, located on I-75 and showcasing the work of more than 650 Kentucky artists, 90 of whom are from Berea and Madison County. World-renowned artists and craftspeople operate more than 40 shops and studios. Berea College is consistently a nationally top-ranked school with exemplary students not only from Kentucky but more than 60 countries. Rich history, vibrant creativity, and continuing vision combine to make Berea a compelling travel destination for art and history buffs alike.

CRAFT AND ECONOMICS: CLASSROOM BUSINESS-PRODUCTION OF ORNAMENTS

This project can be as simple or complex as you wish to make it, depending on the grade level of your students. You may also wish to partner with another teacher on the project so that you can each concentrate on different aspects.

- Brainstorm with students the jobs that must be done to make and market ornaments. Prompt them to include marketing research, advertising, branding, creating, finishing, packaging, sales, and bookkeeping.
- Have students search the internet for examples of pewter cast ornaments. The reason for looking primarily at pewter casting is that you will be creating a one-piece mold, so you don't want students distracted by 3-D cast pieces. Here are some sites to get your started:

1. www.christmasgiftgallery.com/pewter-christmas-ornament.htm
2. www.silverandpewtergifts.com/pewter-ornaments.html
3. www.abetteridea.com/christmas_ornaments.htm
4. www.atdesigns.com/Ornaments/Default.aspx
5. www.corporategiftshowcase.com/christmasornaments.asp

- Discuss the designs you have found. Most are too complex for your classroom production project, but they could be simplified.
- Decide what type of ornament you want to create. It might be best to develop an ornament that represents your school rather than a religious holiday and that could be used in multiple ways (such as an ornament on a cell phone, key ring, or bag tag) rather than a tree ornament.
- Depending on the type of ornament, determine the size range of the ornaments you will produce.
- At this point, you might want to divide into two teams, the business team and the artist team. The business team needs to do marketing research, create a business plan, and develop a bookkeeping system. They will decide when and where the products will be sold and how they will be advertised.
- The art team should measure and draw rectangles on paper with the maximum dimensions you have determined as a class.
- Within these rectangles, have art team students sketch designs for cast ornaments. These can be inside geometric shapes or free form. (You might wish to use this as a geometry lesson by requiring that they create a particular geometric shape that fits within the pre-determined size range.) Remind students to include a hoop that can be used for attaching or hanging the ornament.
- Have the art team create master models based on one or more sketches using Model Magic or similar modeling material. Remind students that models used for one-piece molds must have a flat back and no undercuts. You may have each student create a model based on his/her sketch and then select 1-5 pieces that have the best potential for production and marketing. Or, you may select 1-5 sketches and have students attempt to make one of these designs, then selecting the ones that have the best potential for production casting.
- The business team should be involved in the selection of the products for production. At this point, you should also discuss if you will include a maker's mark and how you will finish and package the products. If you cast in a white material, do you want to color all the ornaments with a faux metal finish or hand paint them? Will they be packaged in plastic or in boxes?

- Have the business team design packaging for the products and determine what they need to purchase to package 25, 50, 75, or 100 ornaments.
- Have the art team create molds using rubber latex (available from art suppliers).
- The entire class should now consider the cost of materials for producing your ornaments. Depending on grade level, you may factor in the cost of creating the molds or you may just project the expenses from this point forward. What will it cost to produce 25, 50, 75, or 100 ornaments? Be sure they include expenses for casting material, finishing supplies, and packaging. If there are expenses for marketing, these need to be included.
- At this point you may need to reorganize your teams. You will need a team to do the casting, a team to do the finishing, and a team to do the packaging.
- Cast multiple pieces using Sculptamold or similar products.
- Finish and package the products.
- Check against your projections. As a class, determine if your expenses were higher or lower than anticipated. Determine the amount you have invested in each piece in terms of materials only. If you added labor costs, how much would that increase the price? What price can you reasonably expect to sell your products for? If you make a profit, what will you use the funds for? Discuss options such as buying supplies for the classroom, donating to charity, or doing a special activity.

Extension:

When entrepreneurs consider the profitability of their products, they must consider the factors of production. Ask students to brainstorm what the factors of production would be for their business venture. Project the Factors of Production chart (below) to help them think of broad categories and then to identify specifics within the categories

Factors of Production and Marketing

Raw materials (natural resources, recycled resources, purchased materials)

Capital resources (tools, equipment, space)

Human capital (skills, knowledge, abilities)

Marketing (packaging, distribution, pricing, and advertising)

RESOURCE GUIDE

General Integration Strategies

- The Partnership for 21st Century Skills www.p21.org
- Arts for Learning www.arts4learning.org/results.aspx?search=integration
- Northeastern Illinois University www.neiu.edu/~middle/Modules/science%20mods/amazon%20components/AmazonComponents3.html
- J. Paul Getty Museum www.getty.edu/education
- Kennedy Center for the Arts ArtsEdge artsedge.kennedy-center.org
- Arts Education Partnership aep-arts.org
- Arts in Basic Curriculum Project www.winthrop.edu/abc/default.htm
- Connecting with the Arts www.learner.org/channel/libraries/connectarts68/library_about.html
- Concept to Classroom course in developing integrated projects www.thirteen.org/edonline/concept2class/interdisciplinary/index.html
- *Cornett, Claudia: Creating Meaning through Literature and the Arts: Arts Integration for Classroom Teachers* (with MyEducationLab), Allyn & Bacon; 4 edition (April 10, 2010)

Artist in Residence Programs

- The Kentucky Arts Council maintains a list of juried artists and provides grants for residencies: www.artscouncil.ky.gov
- VSA Kentucky maintains a list of juried artists and provides grants for residencies: www.vsartsky.org

Websites of Schools with Successful Integration Programs.

Many contain resources, templates, and examples:

Plano Independent School District, Plano, Texas www.pisd.edu

The Plano Independent School District has an impressive site that serves as a directory for its schools' resources.

Bloomfield Hills Schools, Bloomfield, Michigan www.bloomfield.org/lda

Bloomfield Hills Schools has consistently been known as a “lighthouse district” in the state of Michigan and throughout the country. The district’s mission is to enable learners to become architects of their futures, building on a foundation of scholarship, citizenship, service, and integrity. The URL (above) is the Bloomfield Hills resources directory, an extensive library of teachers’ learning development activities. It includes a large, searchable section on interdisciplinary skills.

Park Forest Middle School, State College, Pennsylvania www.ed.psu.edu/k-12/edpgs/su96/interdisciplinary/page.htm

This website, created by a team of teachers who work together at the Park Forest Middle School in State College to create interdisciplinary units, is a good example of how teams of teachers can represent their ideas online and get feedback from other interdisciplinary teams around the nation.

Jakarta International School, Indonesia www.jisedu.org

The Jakarta International School (JIS), Indonesia, is a middle school with an interdisciplinary mission. Students are each assigned to an interdisciplinary learning community. The website is fairly low-tech but provides some good examples of interdisciplinary learning and shows a foreign school using interdisciplinary curricula.

Illinois Math and Science Academy, Aurora, Illinois www.imsa.edu

The Illinois Mathematics and Science Academy (IMSA) is a learning enterprise that builds the capacity of students, teachers, and policy makers to improve and transform mathematics and science teaching and learning. IMSA’s residential educational program serves Illinois students in grades 10-12 talented in mathematics and science; its professional development center serves schools, educational systems, teachers, and students in Illinois and beyond. The website provides impressive resources and a searchable database; a search for “interdisciplinary” brings up interesting resources, both lesson units and articles.



Nathan Hale High School, Seattle, Washington <http://hale.seattleschools.org>

Founded in 1963, the Nathan Hale High School, an urban, public high school located in Seattle, is a member of Ted Sizer's Coalition of Essential Schools of Brown University. The school offers an interdisciplinary four-year humanities program, an interesting example of interdisciplinary learning integrated into a school's structure and mission.

Integrated Resources (Arts and Social Studies)

- The Library of Congress has a plethora of resources, including arts and history resources **www.loc.gov/index.html**
- The National Museum of Women in the Arts has a rich online collection of women artists and women in the arts from the 16th century through contemporary times, including artist profiles, portfolios, and detailed analysis of each art work **www.nmwa.org/collection**
- The Smithsonian has an enormous library of digital collections **www.si.edu/Collections**
- The National Museum of the American Indian has an outstanding collection of resources, online collections, and radio programs related to Native American cultures of the past and present **www.nmai.si.edu/subpage.cfm?subpage=collaboration&second=landing**
- The National Museum of African Arts has online collections at **<http://africa.si.edu/collections/start>** and **<http://africa.si.edu/exhibits/past.html>**
- The National Gallery of Art has online resources and free loan programs **www.nga.gov/education/index.shtm**
- The National Museum of Mexican Art has downloadable and online resources **http://nationalmuseumofmexican-art.org/nmma_education/edu_classroomguides.html**
- The National Building Museum has downloadable resources relating architecture, geography, land use, and the arts **www.nbm.org/schools-educators/educators/lessons.html**
- ISI American Studies Center has a collection of digital images related to specific social studies concepts at **<http://faculty.isi.org/catalog/image/index/id/993>**
- **www.historyonthenet.com** has collections of art works related to different periods of history