What is Arts Infusion?

According to the Kennedy Center Changing Education Through the Arts (CETA) program, arts infusion is:

an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both (Silverstein, Duma and Layne 2010, p. 18).

In Shelby County Schools, the U.S. Department of Education Professional Development for Arts Educators (PDAE) Arts Infusion grant program works with teachers in SCS to infuse the arts into all areas of the curriculum.

Expanding the Definition

An approach to teaching- Arts infusion is not something new. Instead, it is a student-centered approach to teaching that involves deep connections between an arts and non-arts area.

Students construct and demonstrate understanding- The constructivist approach to teaching emphasizes the individual experience. Students construct their own understanding through experience and reflection. The demonstration of understanding, as opposed to mere fact recall, often takes place through student performances.

Through an art form- Music, visual arts, dance, theatre arts and creative writing.

Engage in a creative process- In the arts, the process often determines the quality and impact of the final product. The arts allow students to, in the words of Albert Einstein, “stick with the problem longer.” Student engagement is important, but persisting in the problem-solving process is of equal or greater importance.

Connects an art form and another subject area- Arts infusion is more involved than playing a CD during testing time or asking students to draw their favorite animal. The connection must be deep, and the integrity of both the arts and non-arts area must be protected. As a result, teachers in arts infusion programs participate in professional development and take advantages of online resources and books to increase knowledge and understanding of the artistic process.

Meets evolving objectives in both- As students work through the creative process, learning often takes an exciting, unexpected turn. Teachers and students should be prepared to take advantage of these spur of the moment learning opportunities. As understanding increases, expectations for connections increase as well.
How Do I Start?

One key to success in introducing arts infusion is to start small. Teachers and students alike will need time to adjust to the changes in instruction and the classroom environment. Many experienced arts infusion teachers report a two to three year time span as an acceptable time to become acquainted with the theory, techniques and processes of arts infusion.

Arts Every Day (http://www.artseveryday.org) offers a guide to beginning an arts integration program:

- Arts integration is a fundamental culture shift. It takes time to build awareness, understanding and commitment among members of the school community.

- Ongoing professional development is essential to give classroom teachers facility in arts disciplines and to enable them to analyze curriculum to find the natural connections between arts curriculum and the curriculum in other subject areas including creating lessons and units of instruction.

- Collaboration is essential - between classroom teachers and arts specialists. Common planning time is critical.

- Arts specialists are key resources, collaborators and leaders in developing arts integration programs.

- Arts integration specialists are extremely valuable resources for guiding the planning of professional development and for supporting collaborations among teachers and with partners, such as cultural institutions and teaching artists.

What is a Realistic Timeline?

It may take five years or more to fully realize potential as an arts integration school. Planning to achieve this goal is important. While schools tailor their own pathways to successful arts integration programs, there are some useful steps followed by many experienced arts infusion schools. The following phases are not intended to be prescriptive but rather suggestive of the process:

Phase 1:

Build awareness and commitment within the school community including parents
Look at arts integration models in schools in your area
Begin to build staff in the arts
Engage the school community in planning
Begin to identify and engage partners from the cultural community
Have a team participate in professional development in arts integration and share their experience with colleagues
Make budgetary decisions that reflect commitment to arts integration

Phase 2:
Continue to build staff in the arts
Provide professional development for more teachers in arts integration.
Address leadership for arts integration through arts staff, trained classroom teachers and an arts integration specialist
Identify art integration mentor teachers on staff who could assist in the training of new personnel
Network with other arts integration schools in the city and state
Share successful arts integration units with the school community
Display curriculum maps - curriculum mapping is the process of delineating natural connections between and among curricula for various subject areas, identifying the outcomes met through an arts integrated lesson or unit
Seek cultural experiences for students linked to arts integration through collaboration with arts organizations and teaching artists

Phase 3:
Continue with what is above and attain specific goals such as:
Reach staffing in all four arts disciplines even if utilizing part-time staffing
Reach the point that all teachers have received professional development in arts integration with some having extensive training
Share your work with your world and celebrate the imagination of your students and teachers!
Arts Infusion Lesson Examples

The following lesson plans were written by SCS arts infusion teachers. More sample lessons may be found on the SCS Arts Infusion website at: www.scsk12.org

Elementary Lessons

Teacher: Wanda M. Cheatham Grade Level/Subject: Kindergarten/Music
Name of Arts-Infused Lesson: Counting by 5’s
Content Areas Involved: Counting by 5’s, Singing, Movement

Arts Used:
State Arts Content Standards:
Students will sing alone and with others, a varied repertoire of music.
3.0 Students will improvise melodies, variations, and accompaniments.
8.0 Students will understand relationships between music, the other arts, and disciplines outside the arts.

Materials Used:
Original song =Counting By 5’s
Construction Paper cutouts of Hands and Feet with numbers 5-100

“Big Ideas”: By the end of this arts-infused lesson, my students will know and be able to do the following:
-differences between speaking and singing voice
-explore movement in response to the given song
-explore common elements between music and their classroom

Lesson Steps:
-echo clap short 4 beat patterns using quarter and eighth notes
-movement: allow children to move with the drum; using half notes, quarter notes and eighth notes
-echo sing short 4 beat patterns using So, Mi, and La
-introduce the words of the song by echoing short phrases
-add melody to the words, again with short phrases
-add counting; place construction paper hands and feet with numbers on the chalkboard.
-add movement to compliment the song
-combine song, movement and counting
-perform for classroom teacher if time allows
What Happened? How did the arts-infused activity add to students understanding?

The students were able to understand this lesson because they were using their bodies (hands, feet); the construction paper hands and feet; and movement to reinforce what they were also doing in the classroom. They were very quick to tell me that they were counting by 5’s in the classroom. My classroom teachers were thrilled with the song and activity, and appreciated the additional emphasis in music class.
Name: Lee Loft Date: October 8, 2010
Email Address: lloft@scsk12.org
Grade Level or Subject Area: 2nd
School site: Bartlett Elementary
Topic or Arts-Infused Lesson(s) Theme: Math
Title of lesson: Math Maniac Day
Content Area(s) other than Arts: Geometry, Graphing, Addition, Subtraction, Patterns, Reader’s Theater, Estimation, Tangrams
State Content Standards for the above:
GLE 0206.3.1 Develop pattern recognition
GLE 0206.4.1 Recognize, classify, and transform 2- and 3-dimensional geometric figures.
GLE 0206.5.1 Use and understand various representations to depict and analyze data measurements.
GLE 0206.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.
GLE 0206.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.
GLE 0206.1.3 Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.
GLE 0206.1.4 Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.
GLE 0206.1.5 Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.
GLE 0206.1.6 Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.
GLE 0206.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.
GLE 0206.1.8 Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.
Art or Arts you plan to infuse in this lesson: photography, reader’s theater, development of patterns using tessellations, finding geometric shapes in pictures
State Arts Content Standards:
Standard 2.0 Character Acting
Students will develop basic acting skills by assuming roles and interacting in improvisation.
Learning Expectations
The student will
2.1 Explore sensory and emotional experiences to create a character.
2.2 Use imagination to express thought, feeling and character.
2.3 Explore improvisational skills and techniques in creating a character.
2.4 Explore movement as a means of expression.
2.5 Use the voice as a means of expression.
Standard 6.0 Interdisciplinary Connections
Students will make connections between visual arts and other disciplines.

**What are some “Big Ideas” you students need to know?** (short bulleted list)

- Names of geometric shapes
- Recognition of shapes
- How to interpret bar graphs
- Understanding of estimation
- Ability to manipulate objects to create patterns and create pictures using tangrams
- Number sense to apply to addition and subtraction and number comparison

**How are arts activities infused in this lesson?:** (describe in 2-3 sentences)

The students studied a picture. They used the method of describing what they could see in the picture. They were encouraged to “tell me what else” they saw. They made shapes with their bodies. They had a follow up activity of finding geometric shapes in everyday life. They had to create a shape booklet.

We read the book *The Greedy Triangle* by Marilyn Burns, and then they performed a reader’s theater based on the book.

We read the book *Grandfather Tangs Story- A Tale Told with Tangrams* by Ann Tompert. They used tangrams to create their own animal and wrote a story of how they would spend the day as that animal.

**Literacy Skills Focus:** (CIRCLE student skills utilized in this lesson): All of the following!

- Oral language development
- Concepts of print
- Sense of story and sequence
- Phonemic awareness and phonics
- Background knowledge and vocabulary
- Fluency
- Comprehension
- Writing

**List ALL materials used (including websites; book (texts and trade book) titles with author, publisher, date, page #’s; CD or DVD titles; art works and art supplies; music; people, places, resources, etc.)**

This has all been listed throughout the lesson.

**Briefly and clearly list teaching steps in order of actual instruction:**

I am teaching a transition class. This means that most of the children are below grade level in reading and math. My goal for this class is to bring them to grade level or to determine if testing is needed. I have 2 children that are already on grade level and 16 that are below. I have determined that only two need to be tested for further evaluation based on their STAR Math, STAR Reading, Istation and IXL progress.
This day was created to celebrate math. I gave my students an interest survey at the beginning of the year, and 90% of them stated that math was their least favorite subject. This day was advertised through the use of email, newsletters, and web pages.

I wanted the students to see how much they have learned since school started. We started the day by using the arts infusion strategy of studying a painting and discovering what it has to offer. We then read The Greedy Triangle and began a discussion of how we can find geometric shapes in everyday existence. The students then (on their own- not part of my lesson) began making shapes with their hands and bodies. They even put themselves in groups to make larger shapes!

A follow up activity was assigned and given out. They had to photograph assigned shapes and place them in their shape booklet. Shapes that were not easily found were created by the students using household items. Each child also brought their favorite candy bar to school. We ate them for a snack and then we graphed them using the wrappers. The students answered questions based on their graph.

I had five fifth grade students come and help me with my group rotations. I had an older student assigned to each group to help the students stay on task and be available for immediate feedback. I was monitoring each group as I walked around.

Group 1 - Reader’s Theater – The Greedy Triangle
Group 2 – Estimation- They had to estimate how many paper clips it would take to show their height. Then they had to actually put the paper clips together to obtain the actual number. The students compared their estimations to their actual number.
Group 3- Using tessellation grids- the students used different colors to create patterns.
Group 4- Using dice- the children added 2 and 3 digit numbers. They also subtracted.
Group 5 – Using face cards- students had to identify greater than, less than, or equal numbers.

They swapped groups until everyone had visited every station. We ended our math celebration by watching the movie Donald in Math MagicLand. The students also tried to answer the age old question of how many licks does it take to get to the tootsie roll of a tootsie roll pop. They used tally marks to track their licks. Many did not make it to the end before they could not resist biting!

As a follow up activity for the next week- I read them Grandfather Tangs Story - A Tale Told with Tangrams by Ann Tompert. Each child was given a set of tangrams and we recreated the tangram shapes found in the story. The students then had to create their own animal shape and write what they would do as that animal for a day.

How did you assess student learning during or after this lesson? How do you know students understood the big ideas they needed to know? (2-3 sentences)
The day was a success for me because of the enthusiasm I saw in my students. They were assessed because they performed their reader’s theater the following day. They also turned in their paper clip and tootsie roll estimation papers. They created a graph of their
favorite candy bar and had to answer questions. They created their own animal shapes using tangrams and wrote stories about how they would spend the day as that animal.

**In your personal opinion, how did the art(s) activity contribute to student understanding in this lesson? WHY? (be specific)** (2-3 sentences)
I believe that the arts integration was essential to the understanding of my students. It was a hands-on approach that allowed them to talk freely about what they were seeing without feeling there was one right answer. I believe it opened their imaginations to a whole new way to “see” math and to share it with others.

**How did this lesson exercise and/or increase student’s literacy skills?** (2-3 sentences)
The students were able to perform their reader’s theater, and they added their own body movements to the play to represent each shape. Adding to an existing exercise let me know that the students were comfortable with their knowledge and confident in their ability to share it with others. They students also had to write and read their own stories of their animal tangram adventures.

**In hindsight, what would you do differently during this arts-infused lesson? Why? Be specific.** (2-3 sentences)
I was very pleased with our Math Maniac Day celebration. I believe it showed the students that math can be fun, and that they knew so much. Their confidence grew that day. I would do this celebration again, but perhaps in smaller segments. It was a lot to pack in one day, but every minute was worthwhile!
Title of Lesson: If You Could Hop Like a Frog…. 

Content Areas(s) other than Arts: Mathematics and Language Art

State Content Standards for the above: Language Arts Standards 0701.1.1 Demonstrate control of Standard English through grammar usage, and mechanics (punctuation, capitalization, and spelling; 0701.1.16 Identify correctly and incorrectly spelled words in context; 0701.2.1 Demonstrate critical listening skills essential for comprehension, evaluation, problem solving, and task completion; 0701.2.5 Understand strategies for expressing ideas clearly and effectively in a variety of oral contexts; Math Standards: 0706.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning; 0706.1.2 Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution; 0706.1.6 Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas; 0706.2.7 Use ratios and proportions to solve problems; 0706.1.1 Use proportional reasoning to solve mixture/concentration problems.

Art or Arts you plan to infuse in this lesson: State Arts Content Standards: 2.1 Develop an awareness of the elements of design and the principles of composition through their application; 4.3 Analyze, describe, and demonstrate how factors of time and place influence visual characteristics that give meaning and value to a work of art; 6.2 Describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts.

What are some “Big Ideas” your students need to know? (short bulleted list)

Using Literature, Song and Visual Aid to teach proportion

Create and write ratios and proportions from applied situations and explain the reasoning used.

Build conceptual understanding of ratio.

Understand and use ratios and proportions to represent quantitative relationships.

Perform the appropriate mathematical operations involving ratios
How are arts activities infused in this lesson? (describe in 2-3 sentences)

The students will enter the classroom with the sounds of a frog croaking, they will mimic the sounds and we will begin reading the literature *If You Could Hop Like a Frog* to teach proportion. The student will also learn the proportion song to the tune of Stayin’ Alive.

**Literacy Skills Focus: (CIRCLE student skills utilized in this lesson):**

- Oral language development
- Concepts of print
- Sense of story and sequence
- Phonemic awareness and phonics
- Background knowledge and vocabulary
- Fluency
- Comprehension
- Writing

**List all materials used (including websites; books (texts and trade book) titles with author, publisher, date, page #s; CD or DVD titles; art works and art supplies; music; people, places, resources, etc.)**

Literature: *If You Hopped Like a Frog* by David Schwartz

Examples of proportion problems

Individual pictures of a frog

Construction paper

Individual animal facts

Worksheet

Calculators

**Briefly and clearly list teaching steps in order of actual instruction:**

The students will listen to the sounds of frogs, model the movements of a frog and be given picture of a frog on a leap pad.

The students will be given several warm-up proportion problems (if Pizza Hut is offering 2 large pizzas for $20. Papa John’s is offering 4 pizzas for $30). (Which is the better rate? Create four different proportion problems by arranging the following numbers in numerator and denominator positions?)
We will then begin reading If You Hopped Like a Frog by David Schwartz. It is important to also read the “Dear Reader” letter at the beginning. This will lead the students in the direction of how Mr. Schwartz was able to figure these problems out by using math!!! (Proportion)

The students will model using the first fact that a frog can hop 20 times its body length; demonstrate how to find how far you could hop using your own height? The students will write, draw and verbalize their responses.

The students will be taught the proportion song to the tune of Stayin’ Alive with arm motions

The students will be given their own animal fact card to use. They will compare the information on the card to themselves and provide a detail explanation for their response. There responses must include writing, drawing and mathematical language.

The students will be given an assignment to assess their knowledge of the lesson.

The students will create their own problems that explain how to set up and solve a proportion problem.

How did you assess student learning during or after this lesson? How do you know students understood the big ideas they needed to know? (2 or 3 sentences)

Throughout the lesson, I will assess the students’ knowledge by their responses from the first fact and by their verbal and nonverbal responses on the animal fact information card given to the students.

In your opinion, how did the art(s) activity contribute to student understanding of this lesson? Why? (Be specific) (2 or 3 sentences)

When students are allowed to hear sounds, see an illustration and learn a song they have a better conceptual knowledge of the lesson been taught. The students were given an animal that has movement to illustrate the process of solving a problem and they then took those similar motions to arrive at the correct answers to a proportion problem. Finally, they were able to see the relationship between animal facts and themselves.

How did this lesson exercise and/or increase student’s literacy skills? (2 or 3 sentences)

The students appeared more aware of the process it will take to arrive at the correct answer. The answers and illustrations demonstrated a better understanding of the math concept presented to them. They also were able move from abstract to concrete
knowledge of the material.

In hindsight, what would you do differently during this art infused lesson? Why? Be specific. (2 or 3 sentences)

The first time the lesson was taught, I tried to complete the process in 1 day. The students were grasping the concept, but I noticed there were still some areas that were not fully explored or explained. To really impact the students learning, the lesson should be taught over a 2-day period.
Teaching Artists and Arts Organizations

A 2011 report released by the Presidential Committee on the Arts and the Humanities cites the presence of teaching artists in the classroom as a key strategy in teaching students arts skills, which are inextricably linked to 21st century skills. The Shelby County Schools Arts Infusion Project closely works with teaching artists and arts organizations to provide authentic arts experiences for teachers and students.

The Tennessee Arts Commission maintains a roster of teaching artists that are available to work in your classroom or school. These artists are approved by the TAC and have vast experience in working with children and planning arts-focused lessons with classroom teachers and arts specialists. To view the TAC teaching artist roster, please visit the artist roster page at the Tennessee Arts Commission website: http://www.arts.state.tn.us/ae_res_overview.htm

The TAC offers grants for schools to work with teaching artists, and Student Ticket Subsidy money may also be used to work with TAC teaching artists. Please see the TAC grants page for more information: http://www.arts.state.tn.us/ae_grants.htm

Various arts organizations in the Memphis area offer education programs for schools. Many of the major arts organizations work with schools through the Student Ticket Subsidy program, but they are also willing to work with schools outside STS. If you are interested in booking a performance for your school, please consult the Tennessee Arts Commission (TAC) website for a performing artist roster.
Grant Writing Information

SCS has established different protocols for grant above $10,000, and those below $10,000. The majority of school-based grant applications will fall in the $10,000 or less category. If you anticipate applying for a grant larger than $10,000, please contact James Aldinger: jaldinger@scsk12.org

Funding Opportunities and Grant Resources

The Tennessee Arts Commission is a one-stop grant source for school-based arts projects, teaching artist residency grants and grants for school performances. Please visit their website for applications and to check grant deadlines:

http://www.arts.state.tn.us/grant_categories.htm

Shelby County Education Foundation- http://www.scsef.com/

Grant Wrangler- http://grantwrangler.com/

Target Field Trip Grants- http://sites.target.com/site/en/company/page.jsp?contentId=WCMP04-031880

Donors Choose- http://ww.donorschoose.org

Pepsi Refresh Project- http://www.refresheverything.com/

Dollar General Grant Programs- http://www.dollargeneral.com/dgliteracy/Pages/grant_programs.aspx
General Resources for Arts Infusion

Websites

Shelby County Schools Arts Infusion Page- http://scsaip.weebly.com
Changing Education Through the Arts- http://www.kennedy-center.org/education/ceta/
Arts Every Day- http://www.artseveryday.org/
Mississippi Whole Schools Initiative- http://www.mswholeschools.org/
A+ Oklahoma Schools- http://www.aplusok.org/
Strategies for Arts Integration- http://www2.scholastic.com/browse/collection.jsp?id=457
Opening Minds Through the Arts- http://www.omaproject.org

Books