

Team Egypt!

Integrating the Disciplines

Amanda Welsh Greenwald

Sarah walks into her sixth-grade social studies class and, for the next forty minutes, learns about the causes of the American Revolution. She then walks to her language arts class where she writes an essay about coming of age in Pakistan. In the next class, art, she models clay in the pattern of a Mayan design. Her day continues in much the same manner, as she moves from class to class, shutting off her mind to each class in turn when the concluding bell rings.

Emanuel, a sixth-grade student at a school across town, walks into his social studies class and draws a diagram about the causes of the American Revolution. He then walks to language arts class and writes an essay about *My Brother Sam is Dead*, a novel about an American family torn apart by the American Revolution.¹ In art class, he contrasts paintings by American colonists in the 1700s with portraits of European royalty of the same period, and he paints a self-portrait in American Primitive style. As his day continues, Emanuel begins to make connections between what he learned about the attitude of the colonists towards England and what he reads in the novel and sees in paintings.

As a sixth-grade teacher at Winchester

Thurston School in Pittsburgh, Pennsylvania,² I yearned for a curriculum like Emanuel's—one that would encourage students to see knowledge integrated between the disciplines. Harvey Daniels and Marilyn Bizar, authors of *Methods that Matter*, state that an integrated curriculum results from "teachers translating models from one field into another, importing promising ideas from other subjects, designing cross-curricular investigations, and developing rich thematic units that involve students in long-term sophisticated inquiry."³ When teachers get together to create a curriculum in which one class complements the other, students' ability to learn—and to demonstrate that learning—is enhanced.⁴

During the summer of 1997, Cheryl Capezzuti, an art teacher, and I noticed that we both teach lessons on ancient Egypt in our separate classes. We decided to work on an integrated unit of study in which students would research aspects of ancient Egypt in their social studies class and then apply this knowledge in their art class. As we put our ideas into practice with the students, the project inspired other teachers to integrate their classes into the curriculum.

Right from the start, we got interest and support from administrators. Now there are interdisciplinary coordinators for grades six through twelve, faculty members who meet once a week with all of the teachers in a particular grade. We use our meeting time to discuss curricula, projects, trips, and the progress of individual students. I enjoyed working on these projects so much that I applied for, and was awarded, the interdisci-

plinary coordinator position for the seventh grade for the current school year.

A Unit on Ancient Egypt

In social studies class, students choose a topic in the daily life of Ancient Egypt (commerce, agriculture, worship, transportation, or the social hierarchy) that interests them. They acquire information from books and the web and write a rough draft of a paper on their topic.⁵ They then exchange drafts with a peer, and each "formally critiques" the others' work by writing criticisms and suggestions in the margin. Then each student produces a short, polished paper.

In their language (Latin) class, students learn about hieroglyphics and choose an appropriate phrase or name to write in hieroglyphics on the sarcophagus that they are making in art class.

Science class allows students to investigate the mummification process in order to give authenticity to the mummies they create in art class. They learn which Egyptians were chosen to be mummified and how the process occurred.

In art class, students look at examples of Egyptian art and study mummies and sarcophagi. They learn about the significance of wall paintings to early civilizations. Finally, they demonstrate their knowledge by creating a mummy, sarcophagus, and a small "wall painting" (that is, a mural).

And last year, in computer class, students built web pages using pictures of their art project (taken with a digital camera), written notes, and links to other interesting sites. As a culminating experience, the

On the cover

Models of an Egyptian sarcophagus and mummy by Peter deMontmollin, a sixth-grade student at Winchester Thurston School, Pittsburgh, PA. The approximate height of the models is 20cm.



Model of an Egyptian sarcophagus by Michael Sablowsky, a sixth grade student at Winchester Thurston School, Pittsburgh. Approximate length, 20 cm.

strengths. For example, in social studies class, students were graded on their research effort, their participation in each part of the writing process, and on the quality of their final paper. In art, it was their careful use of the materials and incorporation of ancient images that counted.

Interdisciplinary Curricula

Each year, I rely on my team members for their expertise in the various subject areas. They add new dimensions to the unit of study that I would have been unable to offer. I can envision other disciplines being included in this curriculum. In math class, for example, students could study the geometry of the pyramid or attempt to draw one to scale. The collaboration by teachers on this unit has motivated students to become excited about learning and to take pride in their efforts. It also has built a support group of teachers that is invaluable in an academic environment. Daniels and Bizar state that teachers who work together to create integrated units “are showing kids how to think and are exemplifying the principles that learning never ends, that even teachers have room to grow, and that

school’s computer lab was turned into a multimedia art gallery for an evening. The research papers, art projects, and web pages were on display. Parents came for guided tours of the gallery, creating one of the most rewarding moments of the semester.

Separate Assessments

The team of teachers who created this curriculum debated whether to give one cumulative grade for the entire project or to grade each discipline independently. We decided to grade each discipline independently in order to reward students’

Models of sarcophagus and mummy and diorama presenting—with hieroglyphs—different hypotheses about how the pyramids might have been constructed. Art by York Chen, a sixth grade student at Winchester Thurston School.



students have knowledge to be shared and valued" (3, p. 30). 📖

Notes

1. James Lincoln Collier and Christopher Collier, *My Brother Sam Is Dead* (New York: Scholastic Paperbacks, 1989).
2. Winchester Thurston School is an independent, private school in Pittsburgh, Penn. It is co-ed and has about 600 students, pre-K-12.
3. Harvey Daniels and Marilyn Bizar, *Methods That Matter* (York, Maine: Stenhouse Publishers, 1998), 20-21.
4. John H. Lounsbury (ed.), *Connecting the Curriculum Through Interdisciplinary*

Instruction (Columbus, Ohio: National Middle School Association, 1992); Thomas S. Dickinson and Thomas O. Erb, *We Gain More Than We Give: Teaming in Middle Schools* (Columbus, Ohio: NMSA, 1997).

5. "Egyptian Art: Working with Sculpture," *Art & Man* 20 (January 1990): 1-16; Mary Barnett, *Gods and Myths of Ancient Egypt* (New York: Smithmar, 1996); H. W. Janson and Anthony F. Janson, *History of Art for Young People* (New York: Harry N. Abrams, Inc., 1987); "Working with Stylized Images of Egyptian Art," *Scholastic Art* 29 (November 1998): 1-16; Maia Weinstock, "Mummies Unwrapped," *Science World* 56 (October 1999): 1-16; Carol Donoghue, *The Mystery of the Hieroglyphs* (New York: Oxford University Press, 1999);

"Children of Ancient Egypt," *Appleseeds* (February 1999): 1-34; "Mysteries of Egypt," *Archaeology's Dig* (August/September 1999): 1-40.

About the Author

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Answers to "Mysteries of Ancient Egypt" (on the back cover)

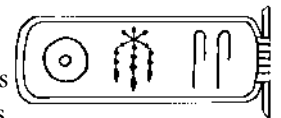
1. **The Curse.** In 1922, British archaeologist Howard Carter discovered the steps in the sand that led down to the tomb of King Tutankhamen (King Tut). The four underground rooms contained gold, jewels, and thousands of objects to be used by the fun-loving pharaoh in his afterlife (he died at the young age of 18, possibly by assassination). Carter lived a normal life span (to sixty-four), but his financial sponsor, Lord Carnarvon, died five months after walking into the tomb, possibly from a centuries-old germ that awaited in the dust. London tabloids noted that a warning had been found on King Tut's tomb not to disturb it, and they called it "the curse of the pharaoh." Several of Carter's associates subsequently died of various causes, but the tabloids linked them all to "the curse."

Today, archaeologists take precautions (like wearing gauze masks) when they open a tomb because dangerous germs may, in fact, be present in the dust around the corpse. Some bacteria or viruses might be able to exist in a dry, dormant state for centuries, only to awaken when breathed in by warm, moist, living, and unsuspecting lungs.

2. **The Riddle.** With the head of a pharaoh and the body of a lion, the Great Sphinx rests near the pyramids at Giza (near modern-day Cairo). Made of soft limestone, the Sphinx (carved around 2500 B.C.) has been eroded by weather and wars fought around it. The Greeks, who invaded Egypt in 332 B.C., had legends that told how, if a traveler came across a sphinx god, it would ask him a riddle. If the traveler did not know the correct answer, the sphinx would kill him.

3. **The Mountain.** The pyramids at Giza, which are over 4,000 years old, are arguably the most massive structures ever created by humans. Teams of men may have pulled the huge blocks of stone (each weighing more than two tons) over rolling logs (or on sleds), up a gently sloping ramp of rocks and sand, as the pyramid was constructed layer by layer. But archaeologists are still searching for any sort of working illustrations or "engineer's blueprints," maybe on papyrus, to confirm this theory.

4. **The Code.** One of the greatest mysteries of all time was the meaning of the hieroglyphs on tomb walls, sarcophagi, and pottery of ancient Egypt. In 1799, a French soldier found the Rosetta Stone, which had Greek and Egyptian writing carved on its face. People suspected right away that the mysterious hieroglyphs, which nobody could understand, told the same story as the Greek sentences carved below them, which scholars could understand. A race began to see who could break the code first, but the hieroglyphs were not fully deciphered until 1822. Why did it take so long? A big part of the confusion was that scholars had assumed that the hieroglyphs stood for concepts (a snake could mean devious). But most of the characters stand for sounds (a snake, in fact, indicates a "j" sound).



The first character in this set is the sound "ra" (Ra was also the sun god), the second is "m" (and it looks rather like an "m"), and the third character, which is repeated (and looks like a staff), is "s." The cartouche (the oval loop) indicates that these hieroglyphs spell the name of a royal person. RAMSES the Second was the pharaoh who built the great temple at Abu Simbel. 📖

References

- Carol Donoghue, *The Mystery of the Hieroglyphs* (New York: Oxford University Press, 1999)
Stephen Hanks, "The Mysterious Sphinx," *Archaeology's Dig* 1, No. 3 (August/September 1999)

- James Putnam, *Pyramid* (New York: Alfred A. Knopf, 1994)
Donovan Webster, "Valley of the Mummies," *National Geographic* 196, No. 4 (October 1999)